

Pure



Water Filtration and Treatment Products Catalog

- Residential
- Commercial
- Industrial

PURE WATER

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Table of Contents

Point of Purchase — End Cap Systems	2	Commercial/Industrial Water Conditioning & RO Systems... 37	
Water Test Kit	3	Systems for Scale Control	38-42
Residential Drinking Water Systems 4		Systems for Chlorine, Taste, Odor and Sediment Reduction	43-44
Part and Filter Kits Part Number Matrix.....	5	Systems for Sediment Reduction with High Efficiency	
RV Water Guard Multipurpose Filtration Systems	6	Micro Z™ Filter Media	45-46
Under Counter Water Filtration System – LCV	6	Commercial Water Softening Systems	47-54
Ultraviolet 3-Stage Systems	7	Commercial Reverse Osmosis Systems	55-62
Kwik-Change™ Ultra Filtration Membrane			
Water Filtration System	7		
4-Stage Reverse Osmosis System	8		
ZRO-4 ZeroWaste® Reverse Osmosis System	8		
One-Piece Manifold Reverse Osmosis System	9		
Kwik-Change™ Reverse Osmosis Systems	9		
Kwik-Change™ ZeroWaste® Reverse Osmosis System	10		
Replacement Filter Kits	11-12		
Replacement RO Membranes	12		
Whole House Water Conditioning Systems 13-16			
Part Number Matrix	17	Parts and Accessories 63	
Whole House Carbon Systems	18	Part Number Matrix	64
Whole House Sediment Reduction Systems.....	19	Pressurized Steel Storage Tanks	65
Whole House Iron, Hydrogen Sulfide, and Manganese Reduction Systems	20	Pumps - Booster and Demand/Delivery	65
Whole House Acidic Water Neutralizing Systems	21	Standard Drinking Water Faucets (Air Gap and Non Air Gap) ...	66
Whole House OneFlow® Residential Anti-Scale Systems	22	Designer Watts Top Mount Drinking Water Faucet	67
Whole House Space Saver 30K Cabinet Water Softener	23	Designer RO Drinking Water Faucets — Series 703 and 905 ...	68
Whole House Water Softening Systems	24	Dual Function Kitchen Faucets	69
Whole House Pro SE Residential and Light Commercial Water Softeners	25		
Whole House Twin-Alternating Water Softeners	26		
Whole House UV Disinfection Systems	27		
Light Commercial Water Conditioning & RO Systems 28			
Part Number Matrix	29	Filter Housings 70	
Mini Water Softener Systems	30	Part Number Matrix	71
Light Commercial Ice Maker Filtration Systems	31-32	Individual Boxed Plastic Housings	72
Commercial Reverse Osmosis Systems	33-34	Plastic Filter Housings	73
Whole House Reverse Osmosis Systems Floor Mount	35	Watts Jumbo Housing & Cartridges	74
Atmospheric Tank and Pump Systems	36	Stainless Steel Commercial/Industrial Filter Housings	75-76
Replacement Commercial RO Membranes	36	Jumbo Filter Cartridges	77

All-in-One End Cap Systems

Pure Water by Watts

Features

- Offers a complete set of our quickest moving products to fill a three-tier end cap as shown here with our included eye-catching POP header
- Uses the convenience of a single ordering number to order a pre-packaged selection of our most popular products
- High-demand, high-turn over product selection
- End Cap Header can be purchased separately
- End Cap Package #1 includes OneFlow Residential Anti-Scale Systems
- End Cap Package #2 includes Pro SE Water Softeners



Package #1 — Ordering Code 7300079

MODEL NO.	ORDERING CODE	QTY
End Cap Header	7300078	1
PWMB10M5	7100331	48
PWMB10M50	7100335	48
PWPL10BBM20	7100411	8
PWCB10P	7100446	25
PWCB10BBP	7100448	12
PWCB20BBP	7100449	6
PWLGAC10	7100454	25
PWHIB20BB	7100269	4
PWHIB34VIH	7100267	6
PWHIB10BB	7100268	4
PWDWLCV2	7100101	2
PWFPLKCV	7100111	3
PWDWUFKC3	7100106	3
PWFPLK2KC4	7100116	6
PWFPLKKCUF	7100118	4
PWR04	7100103	1
PWFPLKSEDCB	7100110	3
PWROKC4	7100107	1
OFRES-0835	7100487	1
OFRES-0935	7100488	1

Package #2 — Ordering Code 7300080

MODEL NO.	ORDERING CODE	QTY
End Cap Header	7300078	1
PWMB10M5	7100331	48
PWMB10M50	7100335	48
PWPL10BBM20	7100411	8
PWCB10P	7100446	25
PWCB10BBP	7100448	12
PWCB20BBP	7100449	6
PWLGAC10	7100454	25
PWHIB20BB	7100269	4
PWHIB34VIH	7100267	6
PWHIB10BB	7100268	4
PWDWLCV2	7100101	2
PWFPLKCV	7100111	3
PWDWUFKC3	7100106	3
PWFPLK2KC4	7100116	6
PWFPLKKCUF	7100118	4
PWR04	7100103	1
PWFPLKSEDCB	7100110	3
PWROKC4	7100107	1
PWSPSE30K	7100139	1
PWSPSE45K	7100140	1

NOTE: End Cap Packages contain listed product and a header panel only. They DO NOT include shelving.



Water Test Kit

Water Test Kit

Pure Water

Water Testing and Equipment Recommendation Program

Features

- The Water Test Kit includes a 250ml sample bottle, Water Analysis and Information form, and a prepaid postage return for your water sample.
- Our water analysis tests for the six most common problems in water conditions including Water Hardness, Iron, Total Dissolved Solids (TDS), pH, Copper, and Manganese.
- Your customer sends their water sample to our San Antonio, TX facility for testing. Once tested, results and equipment recommendations will be forwarded to the Watts representative identified on the request form.



PWKIT-Water Test

Water Test Kit

MODEL NO.	ORDERING CODE	DESCRIPTION	UPC	CASE QTY
PWKIT-Water Test	7300092	WPW Water Test Kit	98268781410	1

PURE WATER

- Filtration
- Reverse Osmosis
- Replacement Filter Kits
- Replacement RO Membranes

Filtration Systems

Residential • Marine • RV



PWDWLCOV2



PWDWUV3



PWDWUFKC3

Reverse Osmosis

What is reverse osmosis?

Reverse osmosis, often referred to as RO, is an advanced water purification method that was initially developed by the U.S. Navy to produce drinking water from seawater for submarine crews. It is a membrane filtration technology that works by forcing water under pressure through the very tiny pores of a semi-permeable membrane. Modern reverse osmosis units for the home combine membrane technology with carbon and mechanical filtration to produce highly purified, great-tasting water.



PWRO5MAN



PWROKC4



PWRO4ZRO

How does it work?

In modern home units, water delivered by normal city water pressure, first flows through a sediment pre-filter which removes any dirt and small particles that are in the water, next a carbon pre-filter, which removes organic contaminants including chlorine and its by-products. Then, it enters the reverse osmosis membrane, a very tight, sheet-like filter, which allows water to pass but rejects dissolved solids like sodium and impurities like lead and arsenic. Some of the water entering the unit is used to cleanse the membrane surface and flows to the kitchen drainpipes. The purified water is stored in a small storage tank until it is needed. When the faucet mounted on the sink is opened, the purified water is forced by air pressure through another carbon filter, which gives it a final polish and from there to the faucet. (This is a simplified description of a 4-Stage RO unit. The simplified description omits a few very essential parts like flow control devices, check valves, and an automatic shutoff device that stops the inflow of water when the storage tank is full.)



Drinking Water & Reverse Osmosis Part Number Matrix

PW RO RO4ZRO

Pure Water

System Type

DW = Drinking Water

RO = Reverse Osmosis

System Model

RWVG2 = Water Guard 2

LCV2 = Standard 2-Stage LCV

UV3 = Ultra Violet 3 Stage

KCUF3 = Kwik Change UF3

RO4 = Standard 4-Stage

RO4ZRO = Standard 4-Stage ZeroWaste®

5MAN = 5-Stage Manifold

KC4 = Kwik-Change 4-Stage

KCZRO = Kwik-Change ZeroWaste®

Drinking Water & Reverse Osmosis Filter Kits Part Number Matrix

PW FPK 4KC4

Pure Water

Filter Type

FPK = Filter Pack

MEM = RO Membrane

System Model

SEDCB = Sediment & Carbon Block Cartridges (Std. RO & Std. ZeroWaste® RO)

LCV = Sediment and LCV Carbon Block Cartridges

UV3 = Ultra Violet 3 Stage (all cartridges and UV Bulb)

3MAN = Sediment and both Carbon Block Cartridges for Manifold RO

5MAN = All 5 replacement Cartridges including Membrane for Manifold RO

4RO4 = All 4 repl. Cartridges including Membrane for Std. RO & Std. ZeroWaste® RO

2KC4 = Sediment & Carbon Block Cartridges for Kwik-Change 4-Stage RO

4KC4 = All 4 replacement Cartridges including Membrane for Kwik-Change RO

KCUF = All 3 replacement Cartridges including UF Membrane for Kwik-Change UF System

KCZRO = All 3 replacement Cartridges including Membrane for Kwik-Change ZeroWaste® RO

25 = 25 Gallons per Day

36 = 36 Gallons per Day

50 = 50 Gallons per Day

75 = 75 Gallons per Day

100 = 100 Gallons per Day

KC60 = Kwik-Change 60 Gallons per Day

Model PWDWRWG2

RV Water Guard Multipurpose Filtration System

Boats and RV's have a common problem with dirt and sand build-up in their holding tanks, causing premature pump failure, as well as clogged and plugged pipes and drains. Watts has the answer with the "RV Water Guard" point-of-entry filtration system. The system attaches easily to virtually any incoming water supply line.



PWDWRWG2

Features

- Two Stages of Filtration
- 5-micron Sediment Filter reduces dirt
- Activated Carbon Filter reduces chlorine, bad taste, and odors
- Adapt-A-Valve™ for easy installation
- Easy to install

Benefits

- Reduces chlorine bad tastes, and odors
- Ideal for RVs and boats
- Connects to cold water fill line with onboard or with hose bibb adapter when refilling holding tank
- Heavy-duty 10-gauge bracket is ideal for high-vibration applications
- Full flow ½" ports

Dimensions

11" W x 14½" H x 5½" D

Replacement Filter Pack

MODEL NO.	FREQUENCY	DESCRIPTION
PWFPLKEDCB	6 Months	includes sediment and carbon filter

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWDWRWG2.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Model PWDWLKV2

Under Counter Water Filtration System

Watts Pure Water 2-Stage LCV Drinking Water System produces high-quality, fresh water on demand by reducing unwanted tastes and odors from your incoming water supply. This system was designed for the Home, RV and Marine Industry where space is at a premium and quality water is essential.



PWDWLKV2

Features

- 2-Stages of Filtration
- Stage-1: Sediment Filter removes particulates down to 5 micron
- Stage-2: 1-Micron Carbon Block Filter reduces lead, cysts and VOC's (Cysts include: cryptosporidium, toxoplasma, giardia, and entamoeba)
- Adapt-A-Valve™ for easy installation
- Elegant Chrome long reach faucet included

Versatility

- Space saving design installs under sink or in limited spaces
- Adapt-A-Valve™ easily connects to water source
- Works in low-pressure applications
- Installs in minutes

Reliability

- Advanced design uses unique technology and high-quality components to ensure years of continuous trouble-free operation
- As with all products in the Watts family, the LCV is backed by our reputation of excellence.

Performance and Benefits

- Reduces lead, cysts, and VOC's (Cysts include: cryptosporidium, toxoplasma, giardia, and entamoeba), chlorine taste and odors
- Ideal for home, RVs and boats
- Includes dedicated faucet and can be connected to any cold water line
- System goes well beyond basic water filtration and typical "pitcher" or "end-of-tap" filter

Dimensions

11" W x 14½" H x 5½" D

Replacement Filters Packs

MODEL NO.	FREQUENCY	DESCRIPTION
PWFPLKCV	6 Months	includes sediment and carbon filter

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-PWDWLKV2.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

Model PWDWUV3

Ultraviolet 3-Stage Systems

Watts Pure Water Series PWDWUV3 produces high-quality, fresh water on demand, utilizing the power of ultraviolet light. Ultraviolet light has been used for years by the bottled water industry as a means to destroy various organisms in water. Now you can have the power of ultraviolet light under your kitchen sink, in your RVs, boat and home.

Features

- Three stages of filtration
- 5-Micron Sediment Filter: Reduces dirt, sand, and rust
- Ultraviolet light
- 1-Micron Carbon Block: Reduces lead, cysts (Cysts include: cryptosporidium, toxoplasma, giardia, and entamoeba)
- Adapt-A-Valve™
- Easy to install

Benefits

- Reduces lead, chlorine, bad tastes, and odors
- Ideal for RV's and boats
- Includes dedicated faucet or can be connected to cold water line

Dimensions

14" W x 16" H x 5½" D



PWDWUV3

Replacement Filter Packs

MODEL NO.	FREQUENCY	DESCRIPTION
PWMB10M5	6 Months	5-micron sediment filter
PWCB10LED	6 Months	1-micron carbon block filter
PWFPUV3	Annual	Includes all filters and UV Replacement Lamp

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWDWUV3.

Model PWDWUFKC3

Kwik-Change™ Ultra Filtration Membrane Water Filtration System

Features

- Includes Designer Faucet in Brushed Nickel finish
- Kwik-Change™ cartridges are the fastest changeable cartridges on the market (30 second filter changeout process)
- ¼-turn pivot filter head makes for ease of accessibility and filter change, reduces the amount of tube connections for greater reliability and reduces leak potential
- Cartridges connect to and disconnect from the unit by simple ¼-turn
- Space saving design installs under sink or in limited space
- Double Seal O-ring cartridges ensure system integrity
- No storage tank needed
- Requires only normal line pressure to operate
- Dispenses a continuous supply of water
- Requires minimal maintenance and will provide clean, safe, great-tasting water

Reliability and Performance

- Advanced design uses unique technology and high-quality components to ensure years of continuous operation with trouble-free performance
- The Kwik-Change™ System water quality output exceeds the purity of other filtration and faucet mount devices

Performance

Tested	% of Reduction
Cysts	99.95
Cryptosporidium	99.95
Entamoeba	99.95
Giardia	99.95
Toxoplasma	99.95
Chlorine	98.00

Dimensions

10" W x 15" H x 4" D

Specifications

- Stage 1:** Sediment Filter removes particulates down to 5 microns
- Stage 2:** Carbon Block Filter removes objectionable taste, chlorine taste, and odors
- Stage 3:** UF Membrane consists of a capillary bundle of ultrafiltration membranes providing a physical barrier to particles, large dissolved molecules, suspended solids, turbidity, most colloids, and impurities as small as 0.25 microns



PWDWUFKC3

- Adapt-A-Valve™ easily connects to water source
- Automatic shutoff valves in the manifold eliminate the need to shut off the incoming water supply when changing out the filters
- Proprietary sanitary filter cartridges eliminate water spills during cartridge replacement

Replacement Filter Packs

MODEL NO.	FREQUENCY	DESCRIPTION
PWFPUK2KC4	6 Months	Includes sediment and carbon pre-filters only
PWFPUKCUF	Annual	Includes all filters and UF membrane

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWDWUFKC3.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

Model PWRO4

4-Stage Reverse Osmosis System

Watts Pure Water 4-Stage Reverse Osmosis (RO) System is a tried and true reverse osmosis system! Watts Pure Water 4-Stage RO System begins with Stage 1, a 5-micron Sediment filter that traps particulate matter like dirt, rust, sand, silt and sediment that will affect the taste and appearance of your water. Stage 2 is a 5-micron Carbon Block filter that provides a reduction of chlorine, chloramine and other materials that cause bad taste and odors (these are called PRE-filters because they filter in front of the reverse osmosis membrane). Stage 3 is the heart of the reverse osmosis system, the RO Membrane. This semi-permeable membrane is 1/10,000 of a micron and will effectively reduce TDS (total dissolved solids), sodium and a wide range of contaminants such as arsenic, lead, perchlorate, chromium, copper and radium. It will also remove over 99.95% cysts such as giardia and cryptosporidium. Stage 4 is a high-quality GAC final filter (this is called a final filter because it filters after the membrane). The filtered RO water passes through the membrane and enters the storage tank. When you're ready for use, it will leave the storage tank and pass through this fourth stage on its way up to the faucet. The end result — crystal clear, high quality, and great tasting water!



PWRO4

Applications

Home, Office, Ice Maker Kits, Beverage Dispensers, and more/

Features

- Multi-Stage water filtration
- Easy to install

Dimensions

16" W x 16" H x 6" D

Replacement Filter Packs

MODEL NO.	FREQUENCY	DESCRIPTION
PWFPSEDCB	6 Months	Includes sediment and carbon filter only
PWFPKR04		Includes all filters and membrane
PWMEM50	2 - 5 years	50 gpd membrane
PWILGAC10	Annual	10" final in-line filter

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature [ES-WQ-PWRO4](#).

Model PWRO4ZRO

ZRO-4 ZeroWaste® Reverse Osmosis System

The all new patented ZeroWaste® Point-of-Use Reverse Osmosis (RO) System is the first ever that wastes no water. Comparable systems typically waste up to 4-12 gallons of RO water for every gallon of RO water produced. This highly efficient Watts RO system provides better-than-bottled water quality for residential applications.

Features

- 4-Stage System of Filtration

Stage 1: Sediment Filter removes particulates down to 1 micron

Stage 2: Carbon Block Filter removes chlorine taste and odors

Stage 3: Advanced TFC Membrane rejects impurities down to 1/10,000th of a micron

Stage 4: Activated Carbon Final Filter serves as a final polish to remove any trace residuals

- Re-use of rinse water (no waste)
- 50 gallons per day TFC membrane
- Upgraded Watts top mount faucet
- 3-Gallon Storage Tank

Versatility

- No faucet air gap or drain connection required
- Space saving design, installs under sink or in limited space
- Adapt-A-Valve™ easily connects to water source
- Ideal for low pressure or well applications

Reliability

- Advanced design uses patented technology and high-quality components to ensure years of continuous operations with trouble-free performance
- As with all of the products in the Watts family, the ZeroWaste RO® is backed by Watts reputation of excellence
- Economical and environmentally friendly



PWRO4ZRO

Dimensions

20" W x 18" H x 6" D

Replacement Filter Packs

MODEL NO.	FREQUENCY	DESCRIPTION
PWFPSEDCB	6 Months	Includes sediment and carbon filter only
PWFPKR04		Includes all filters and membrane
PWMEM50	2 - 5 years	50 gallon per day membrane

Note: Water conditions may require more frequent cartridge replacement



System tested and certified by NSF International against NSF/ANSI Standard 58 for the reduction of the claims specified on the performance data sheet.

For additional information, access online literature [ES-WQ-PWRO4ZRO](#).

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.



Residential Drinking Water Systems

Reverse Osmosis

Model PWRO5MAN

One-Piece Manifold Reverse Osmosis System

Watts Pure Water revolutionizes the industry through state-of-the-art technology. Our unique Manifold RO System provides a seamless water path effectively eliminating 17 connections. The PWSYS-RO-MAN5 brings unequaled water quality and system value.

Features

- Premium filtration package
- Stage 1: Sediment filter removes particulates down to 5 microns
- Stage 2: Carbon Block filter removes chlorine taste and odors
- Stage 3: Carbon Block filter removes chlorine taste and odors
- Stage 4: High-production TFC membrane rejects impurities down to 1/10,000th of a micron
- Stage 5: Final filter for enhancing water taste
- Adapt-A-Valve™ for easy installation
- Air Gap faucet meets local plumbing codes
- 3-gallon plastic storage tank

Versatility

- Space saving design installs under sink or in limited space
- Adapt-A-Valve™ easily connects to water source
- Increased output options available

Reliability

- Advanced design uses unique technology and high-quality components to ensure years of continuous operation with trouble-free performance
- One-piece manifold minimizes potential for water leakage
- Non-corroding plastic water storage tank

Performance

- Produces up to 50 gallons of bottled quality water per day
- NSF tested and Certified to Standard 58
- System goes well beyond basic water filtration and the typical faucet mount products



PWRO5MAN

Dimensions

16½" W x 17" H x 5" D

Replacement Filter Packs

MODEL NO.	FREQUENCY	DESCRIPTION
PWFHK3MAN	6 Months	Includes sediment and carbon filters only
PWFHK5MAN		Includes all filters and membrane
PWMEM50	2 - 5 years	50 gallon per day membrane
PWILGAC10	Annual	10" final in-line filter

Note: Water conditions may require more frequent cartridge replacement



System tested and certified by NSF International against NSF/ANSI Standard 58 for the reduction of the claims specified on the performance data sheet.

For additional information, access online literature [ES-WQ-PWRO5MAN](#)

Model PWROKC4

Kwik-Change™ Reverse Osmosis Systems

Flow Rate: Up to 60 gallons per day (227 lpd)

The Kwik-Change™ Reverse Osmosis (RO) System produces up to 60 gallons per day of high-quality water that exceeds the quality of most bottled waters.

Features

- Kwik-Change™ cartridges are the fastest changeable cartridges on the market
- ¼-turn Pivot filter makes for ease of accessibility and filter change, reduces the amount of tube connections for greater reliability and less potential leaks
- Proprietary cartridges connect to (and disconnect from) the unit by a simple ¼ turn
- Space saving design installs under sink or in limited space

- Adapt-A-Valve™ easily connects to water source for ¾" compression or ½" NPT
- Automatic shutoff – No need to shut off incoming supply when changing filters
- Top mount designer faucet installs top side and provides a ¾" high-flow water delivery system
- Air Gap faucet meets local plumbing codes
- 3-Gallon water storage holding tank
- Additional faucet finishes available



PWROKC4

Dimensions

12" W x 15" H x 4" D

Replacement Filter Packs

MODEL NO.	FREQUENCY	DESCRIPTION
PWFHK2KC4	6 Months	Includes sediment and pre-carbon filters only
PWFHK4KC4		Includes all filters and membrane
PWMEMIK60	2 - 5 years	60 gallon per day membrane
PWKGAC13	Annually	GAC final filter

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature [ES-WQ-PWROKC4](#).

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

Model PWROKCZRO

Kwik-Change™ ZeroWaste® Reverse Osmosis System

Flow Rates: Up to 60 gallons per day (227 lpd)

The patented ZeroWaste® Point-of-Use Reverse Osmosis System is the first ever RO System that wastes no water. This highly efficient system provides better-than-bottled water quality for residential applications.



Features

- Patented technology
- 100% efficient - No wasted water
- Saves as much as 7000+ gallons per year in a typical residential application
- Ideal for low pressure or well applications
- Produces up to 60 gallons per day of high-quality drinking water
- Kwik-Change™ cartridges are the fastest changeable cartridges on the market
- 1/4-turn pivot filter makes for ease of accessibility and filter change, reduces the amount of tube connections for greater reliability and less potential leaks

- Proprietary cartridges connect to (and disconnect from) the unit by a simple 1/4 turn
- Space saving design installs under sink or in limited space
- Adapt-A-Valve™ easily connects to water source for 3/8" or 1/2"
- Automatic shutoff – No need to shut off incoming supply when changing filters
- No faucet air gap or drain connection required
- 3-gallon water storage holding tank
- Upgraded Watts top mount faucet
- Additional faucets and finishes available

Dimensions

15" W x 14½" H x 5" D

PWROKCZRO

Replacement Filter Packs

MODEL NO.	FREQUENCY	DESCRIPTION
PWKCCB13	6 months	Carbon Block
PWFPPKCZW		Includes all filters and membranes
PWKGAC13	Annual	GAC filter
PWMEMK60	2-5 years	60 GPD membrane

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWROKCZRO.

Replacement Filter Kits



SYSTEM MODEL NO.	REPLACEMENT FILTER MODEL NO.	FREQUENCY	DESCRIPTION
PWDWRWG2	PWFPMKEDCB	6 Months	Includes sediment and carbon filter



SYSTEM MODEL NO.	REPLACEMENT FILTER MODEL NO.	FREQUENCY	DESCRIPTION
PWDWLKV2	PWFPMKLCV	6 Months	Includes sediment and LCV carbon filter



SYSTEM MODEL NO.	REPLACEMENT FILTER MODEL NO.	FREQUENCY	DESCRIPTION
PWDWUV3	PWMB10M5	6 Months	5-micron sediment filter
	PWCB10LED	6 Months	1-micron carbon block filter
	PWFPMKUV3	Annual	Includes all filters and UV Replacement Lamp



SYSTEM MODEL NO.	REPLACEMENT FILTER MODEL NO.	FREQUENCY	DESCRIPTION
PWDWUFKC3	PWFPMK2KC4	6 Months	Includes sediment and pre-carbon filter only
	PWFPMKKCUF	Annual	Includes all filters and UF membrane



SYSTEM MODEL NO.	REPLACEMENT FILTER MODEL NO.	FREQUENCY	DESCRIPTION
PWR04	PWFPMKEDCB	6 Months	Includes sediment and carbon filter only
	PWFPMK4R04		Includes all filters and membrane
	PWMEM50	Annual	10" final in-line filter
	PWILGAC10	2-5 years	50 gallon per day membrane



SYSTEM MODEL NO.	REPLACEMENT FILTER MODEL NO.	FREQUENCY	DESCRIPTION
PWR04ZRO	PWFPMKEDCB	6 Months	Includes sediment and carbon filter only
	PWFPMK4R04		Includes all filters and membrane
	PWMEM50	Annual	10" final in-line filter
	PWILGAC10	2-5 years	50 gallon per day membrane

Note: Water conditions may require more frequent cartridge replacements

Replacement filter kits and membranes sold individually (Page 11 & 12).

Replacement Filter Kits



SYSTEM MODEL NO.	REPLACEMENT FILTER MODEL NO.	FREQUENCY	DESCRIPTION
PWR05MAN	PWFPMK3MAN	6 Months	Includes sediment and carbon filters only
	PWFPMK5MAN		Includes all filters and membrane
	PWMEM50	Annual	10" final in-line filter
	PWILGAC10	2-5 years	50 gallon per day membrane



SYSTEM MODEL NO.	REPLACEMENT FILTER MODEL NO.	FREQUENCY	DESCRIPTION
PWROKC4	PWFPMK2KC4	6 Months	Includes sediment and pre-carbon filters only
	PWFPMK4KC4		Includes all filters and membrane
	PWMEMKC60	Annual	GAC final filter
	PWKGAC13	2-5 years	60 gallon per day membrane



SYSTEM MODEL NO.	REPLACEMENT FILTER MODEL NO.	FREQUENCY	DESCRIPTION
PWROKCZRO	PWKCCB13	6 Months	Carbon Block
	PWFPMK2KC4		Includes all filters and membrane
	PWKGAC13	Annual	GAC final filter
	PWMEMKC60	2-5 years	60 GPD membrane

Replacement RO Membranes



MODEL NO.	DESCRIPTION
PWMEM25	25 GPD RO Membrane
PWMEM36	36 GPD RO Membrane
PWMEM50	50 GPD RO Membrane
PWMEM75	75 GPD RO Membrane
PWMEM100	100 GPD RO Membrane
PWMEMKC60	60 GPD Kwik-Change™ Membrane

Note: Water conditions may require more frequent cartridge replacements

Replacement filter kits and membranes sold individually (Page 11 & 12).



Whole House Water Conditioning Systems

- Systems for Chlorine, Taste, Odor and Sediment Reduction
- Systems for Sediment Reduction with High Efficiency Micro Z™ Filter Media
- Systems for Iron Manganese and Hydrogen Sulfide Reduction
- Systems for Acid Neutralizing
- Systems for Scale Reduction
- Water Softener- Cabinet Model
- Water Softener — Series PWSSTD
- Water Softener — Series PWSPSE
- Water Softener — Series PWSTA
- Ultraviolet (UV) Disinfection Systems



PWSSTD



PWSPSE



PWSTA



PWBWIRON



PWBWCAL



OFRES



PWSCAB30K



Whole House Water Conditioning Systems

2

PURE WATER

How does a Water Softener work?

Basically, the resin or mineral inside the mineral tank is specially designed to remove "hard" particles of lime and calcium, by a simple ion exchange process. The resin beads inside the softener tank have a different or opposite electrical charge than the dissolved particles of the incoming water. Because of this electrical charge difference, the dissolved particles suspended in your water will cling to the resin beads on contact, thereby ridding the water of these particles, causing the water exiting the unit to be "soft". The resin has a limit to how much of these hardness particles it can hold, which is why there are many different sizes of softeners and also why regeneration or brining is required.

Whole House Water Quality Problems

- Hardness**
- Iron**
- Manganese**
- Bad tastes**
- Foul odors**
- Chlorine and harmful chlorine by-products**
- Turbidity**
- Acidic water**
- Scale control**

The continuous water cycle

Nature intended us to have high-quality water. This is why we have the continuous water cycle, whereby water from our oceans, rivers, lakes and streams fall to the ground as rain or snow and becomes filtered as it seeps through the earth's surface. As the water works its way through the ground it picks up minerals by dissolving limestone, causing water hardness. Water may also come into contact with Iron, Manganese, Arsenic and other contaminants, which cause additional water treatment problems.

The chart below lists typical whole house water quality problems and indicates which equipment effectively corrects any problems you may have in your home.

WATER QUALITY PROBLEMS	SYMPTOMS	RECOMMENDED EQUIPMENT	SERIES NAME
Hardness	Mineral deposits on dishes and glassware; stiff, dingy laundry; high soap usage and need for fabric softeners; dry, itchy skin and scalp; unmanageable hair; extra work to remove soap curd on bathtubs and shower stalls; high energy costs due to scale build-up in pipes and on appliances.	Water Softener	Cabinet Model Series PWSSTD Series PWSPSE Series PWSTA
Chlorine, foul odors and tastes	Chlorine taste; foul odors; damage to hair; itchy skin.	Backwashing filter using activated carbon	Whole House Carbon Systems
Iron & Manganese	Unpleasant metallic tastes; rust particles; staining on plumbing fixtures; red water; odors.	Iron filter	Whole House Iron Systems
Turbidity	Cloudy water; sediment, sand, silt and rust particles.	Media filter	Micro Z Systems
Acidic water (low pH)	Green stains on bathroom sinks and other porcelain (surfaces; blue green water. (Acidic water may cause corrosion of pipes & plumbing fixtures.)	Acid neutralizer using Calcite	Acid Neutralizing Systems
All of the above	All of the above	Reverse Osmosis System	Series - PWR0440
Scale Built-up	Internal scale formation on plumbing surfaces, appliances and plumbing fixtures	OneFlow®	Residential OneFlow Systems



Watts® Water Softeners

"Hard" water is not considered unhealthy; however, hard-water problems end up costing you money through increased soap usage, reliance on water softening products and a shorter life for appliances due to scale build-up in pipes and other factors.

To correct water hardness, Watts offers a wide range of water conditioning systems, designed to improve water quality throughout your entire household.

Enjoy these many benefits Watts® water softeners provide

- Spot-free glassware and dishes
- No mineral deposits on bathtubs and shower stalls
- Brighter, softer laundry
- Less reliance on water-softening products
- Dramatic reduction in soap usage
- Manageable hair because shampoo works better
- Pipes remain free of calcium scale build-up
- Extended life of appliances and reduced energy costs because scale is virtually eliminated
- Spot-free car wash (if softened water is used)

Metered valve for greater efficiency

Our control valve is metered for greater efficiency and reduced salt usage, because regeneration of the softener resin is based on water consumption. Push-button settings provide ease-of-use.

Model selection is typically based on water hardness, water usage, water source and other factors.

See page 16 for Water Softener Sizing Information.





Whole House Water Conditioning Systems

Calculate your hardness

Either in PPM (Parts Per Million) or in GPG (Grains Per Gallon)

- If you have PPM convert by dividing by 17.1
- If you have GPG convert by multiplying by 17.1

Until you have reached your grain hardness

Compensated hardness

When sizing water conditioning equipment, the hardness should be based on compensated hardness. Compensated hardness takes into consideration minerals and other factors that will reduce the softening capacity of a softener. These items cannot be picked up in a standard hardness test. To arrive at compensated hardness, multiply the figure on the right by the hardness in grains per gallon.

Your Test Hardness	Multiply By	Compensated Hardness
1 — 20	1.1	= _____
21 — 40	1.2	= _____
41 — 70	1.3	= _____
71 — 100	1.4	= _____
101 — Plus	1.5	= _____

Determine if a softener is needed, see defined chart below: Terms Defined

TERM	GPG*	PPM**
Soft	1.0 or less	17.0 or less
Slightly Hard	1.0 to 3.5	17.1 to 60
Moderately Hard	3.5 to 7.0	60 to 120
Hard	7.0 to 10.5	120 to 180
Very Hard	10.5 or over	180 or over

* GPG - Grains Per Gallon

**PPM- Parts Per Million

FLOW RATES IN PIPES NORMAL TO PEAK

3/4"	=	10-15 GPM
1"	=	16-30 GPM
1 1/4"	=	30-35 GPM
1 1/2"	=	40-70 GPM
2"	=	65-120 GPM
2 1/2"	=	80-170 GPM
3"	=	120-270 GPM
4"	=	250-500 GPM
6"	=	500-1100 GPM
8"	=	1000-2000 GPM
10"	=	1500-3000 GPM

Always determine both
(1) Flow Rate and
(2) Capacity Total in Grains

Softener Sizing Selection Chart

NUMBER OF PEOPLE USING SOFTENED WATER IN HOUSEHOLD								
	1 75 gal	2 150 gal	3 225 gal	4 300 gal	5 375 gal	6 450 gal	7 525 gal	8 600 gal
1-5	15k	15k	15k	15k	15k	30k	30k	30k
	12	12	6	6	4	6	4	3
	1700	1600	1500	1500	1400	3500	3400	3300
6-10	15k	15k	15k	30k	30k	30k	30k	45k
	12	4	3	4	4	3	3	4
	800	750	650	1500	1400	1300	1200	2100
11-15	15k	15k	30k	30k	30k	45k	45k	45k
	6	3	4	3	3	3	3	2
	500	400	950	900	800	1300	1200	1100
16-20	15k	15k	30k	45k	45k	45k	60k	60k
	4	3	3	4	3	3	3	2
	375	300	675	1100	1000	900	1200	1100
21-25	15k	30k	30k	45k	45k	60k	60k	90k
	4	4	3	3	2	3	2	3
	250	600	500	800	700	1000	900	1600
25-30	30k	30k	45k	45k	60k	90k	120k	120k
	6	3	3	2	2	3	3	3
	450	400	550	500	700	1000	1500	1400
31-35	30k	30k	45k	60k	90k	90k	120k	120k
	6	3	3	3	4	3	3	3
	400	350	550	700	1200	1100	1500	1400
36-40	30k	45k	45k	60k	90k	120k	120k	-
	4	4	2	2	3	3	3	-
	400	525	450	600	975	1350	1200	-
41-45	45k	45k	60k	90k	90k	120k	-	-
	6	3	3	3	3	3	-	-
	500	400	500	900	800	1000	-	-
45-50	45k	60k	90k	90k	120k	-	-	-
	6	4	4	3	3	-	-	-
	500	600	950	850	1100	-	-	-

KEY TO EACH HORIZONTAL SEGMENT IN CHART		
Softener Size (thousands of grains) Model		
Number of days between regeneration cycle		
Meter setting (gallons used between regeneration cycle)		

Meter settings based on softener capacities at minimum brining (6 lbs. / cu. ft.).

For Larger Applications Call Your Watts Representative



Residential Whole House Water Conditioning Systems Part Number Matrix

PW S PSE 45K

Pure Water

OF = OneFlow

System Type

S = Softener

BW = Backwashing

RES = Residential

UV = Ultraviolet

System Model

PSE = Pro SE Series Water Softener

GAC = Granular Activated Carbon Backwashing System

MZ = Micro Z Backwashing System

IRON = Iron Backwashing System

CAL = Acidic Water Neutralizing System using Calcite

0835 = Anti-Scale System – 8 gpm

0935 = Anti-Scale System – 12 gpm

1035 = Anti-Scale System – 16 gpm

CAB = Cabinet Style Water Softener

STD = Standard Water Softener

PSE = Pro SE Series Water Softener

TA = Twin Alternating Water Softener

2110 = 2 Gallons Per Minute, 110v

2220 = 2 Gallons Per Minute, 220v

6110 = 6 Gallons Per Minute, 110v

6220 = 6 Gallons Per Minute, 220v

8110 = 8 Gallons Per Minute, 110v

8220 = 8 Gallons Per Minute, 220v

12110 = 12 Gallons Per Minute, 110v

12220 = 12 Gallons Per Minute, 220v

BULB = UV Replacement Bulb

BAL = UV Replacement Ballast

QS = UV Replacement Quartz Sleeve

System Capacity

1 = 1 Cubic Feet of Media

1.5 = 1.5 Cubic Feet of Media

2 = 2 Cubic Feet of Media

3 = 3 Cubic Feet of Media

4 = 4 Cubic Feet of Media

30K = 30,000 Grain Capacity

45K = 45,000 Grain Capacity

60K = 60,000 Grain Capacity

90K = 90,000 Grain Capacity

120K = 120,000 Grain Capacity

2 = 2 Gallons per Minute

6 = 6 Gallons per Minute

8 = 8 Gallons per Minute

12 = 12 Gallons per Minute

Series PWBWGAC

Whole House Carbon Systems

Connection Size: 1" (25mm)

Flow Rate: Up to 15 gpm (56 lpm)

Watts Whole House filters for chlorine, taste, odor, and sediment removal.

Our Series PWBWGAC activated carbon filters with the Series Pro SE Control Valve are designed for residential and light commercial applications up to 15 gallons per minute. Watts activated carbon filters are highly popular because they correct a wide range of water quality issues by removing chlorine, taste, odors, organic chemicals, and sediment.

Activated carbon has been used in the treatment of drinking water for over 2000 years. It was found that charred wood products aided in improving the quality of drinking water.

Media

We use Aquasorb® coconut shell activated carbon. This is a high-activity granular activated carbon manufactured by steam activation of select coconut shell charcoal. Its high micro-porosity makes it particularly well suited for the adsorption of low molecular weight compounds at very low concentrations. It is also ideally suited for the removal of oxidizing agents such as chlorine from drinking water. Another important feature of this activated carbon is its superior mechanical hardness which helps assure a clean, low dust product with an exceptionally long life span.

Series Pro SE Control Valve

Manufactured from high-tech materials, the Series Pro SE control valve has been engineered and tested to withstand the equivalent of 27 years of uninterrupted daily use. The proprietary design features a Teflon® coated piston that glides through a series of seals and spacers. This seal/spacer and piston configuration is the most reliable design in control valve technology. The valve features an electronic control for easy programming.

Filter Tank

Features a highly corrosion resistant NSF Certified fiberglass tanks with a thermoplastic inner liner. The tanks are NSF/ANSI Standard 44 or 61 certified.

Benefits

Great tasting water from every tap in your house!

No bad tastes!

No foul odors!

Crystal clear water for drinking, bathing, and cooking!

User-friendly equipment.

Low maintenance due to automatic operation.



PWBWGAC

MODEL NO.	VALVE	MINERAL TANK SIZE	MEDIA CUBIC FOOT	GRAVEL (LBS.)	SERVICE FLOW (GPM)	PRESSURE DROP (PSI)	BACKWASH (GPM)	FLOOR SPACE L X W X H
PWBWGAC1	Time Clock	9" X 48"	1	10	3.7	<15	4	16" X 10" X 55"
PWBWGAC15	Time Clock	10" X 54"	1.5	10	5.5	<15	5	16" X 11" X 62"
PWBWGAC2	Time Clock	12" X 52"	2	30	7.4	<15	8	17" X 13" X 60"
PWBWGAC3	Time Clock	13" X 65"	3	40	11.1	<15	9	18" X 14" X 74"
PWBWGAC4	Time Clock	16" X 65"	4	60	14.8	<15	15	20" X 17" X 74"

For additional information, access online literature ES-WQ-PWBWGAC



Whole House Sediment Reduction Systems

Micro Z™ Filter Systems for Sediment Reduction

Series PWBWMZ

Residential Backwashing Filter Systems

Connection Sizes: 1" (25mm)

Flow Rates: Up to 15 gpm (57 lpm)

Watts Whole House filters for superior sediment removal.

Watts Pure Water filtration systems for sediment removal use our high performance Micro Z™ filter media to provide increased loading capacities and higher service flow rates. Micro Z™'s unique external surface offers increased porosity to outperform sand filters by reducing water consumption. A Micro Z™ filter bed holds 2.8 times the amount of solids a sand bed holds, reducing backwash requirements by almost three times.

Features

- High service flow rates
- Superior filtration performance!
- Reliable equipment designed for long-term service
- Reduces water consumption because the need to backwash is less
- High solids loading
- 3-5 micron particle size removal
- Single media filter bed

Media

Our Micro Z™ is a special highly efficient granular filter media that has a nominal particle size removal of 3-5 micron. Compare that to sand at 30 micron. Micro Z™ allows sediment to penetrate deep into the bed for high loading efficiencies to reduce backwash demands and overall wastewater generation.

Series Pro SE Control Valve

Manufactured from high-tech materials, the Series Pro SE control valve has been engineered and tested to withstand the equivalent of 27 years of uninterrupted daily use. The proprietary design features a Teflon® coated piston that glides through a series of seals and spacers. This seal/spacer and piston configuration is the most reliable design in valve technology. The valve features an electronic control for easy programming.

Filter Tank

Features a highly corrosion resistant NSF certified fiber-glass tanks with a thermoplastic inner liner. The tanks are NSF/ANSI Standard 44 or 61 certified.



PWBWMZ

MODEL NO.	VALVE	MINERAL TANK SIZE	MEDIA CUBIC FOOT	GRAVEL (LBS.)	SERVICE FLOW (GPM)	PRESSURE DROP (PSI)	BACKWASH (GPM)	FLOOR SPACE L X W X H
PWBWMZ1	Time Clock	9" X 48"	1	10	9	15	7	16" x 10" x 55"
PWBWMZ15	Time Clock	10" X 54"	1.5	10	10	15	9	16" x 11" x 62"
PWBWMZ2	Time Clock	12" X 52"	2	30	10	15	12	17" x 13" x 60"
PWBWMZ3	Time Clock	13" X 65"	3	40	15	15	15	18" x 14" x 74"

For additional information, access online literature ES-WQ-PWBWMZ.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWBIRON

Whole House Iron, Hydrogen Sulfide, and Manganese Reduction Systems

Connection Size: 1" (25mm)

Flow Rate: Up to 18 gpm (68 lpm)

Watts Whole House Filters for iron, hydrogen sulfide (rotten egg smell), and manganese reduction

Our Whole House Iron Systems are a unique, chemical free, approach to reducing red staining iron, rotten egg smelling hydrogen sulfide, and black staining manganese in your water. These systems use the natural air we breathe to charge the water with oxygen. Together the oxygen and contaminants are introduced onto the surface of our catalytic filtration media. The media uses the oxygen to oxidize the contaminants and then traps the impurities.



PWBIRON

Benefits

- No chemicals needed for regeneration.
- High flow rates with smaller system space requirements than competing models.
- No bad tastes, odors, or staining caused by iron, hydrogen sulfide, or manganese.
- Crystal clear water for drinking, bathing, and cooking.
- User-friendly equipment.
- Low maintenance due to automatic operation

Media

Our Filox media is an advanced form of manganese dioxide (MD). Virtually all iron, hydrogen sulfide, and manganese removal medias have some percentage of MD. At 80% or greater, Filox boasts the highest percentage of MD and the highest flow rates per cubic foot of all of the iron removal medias on the market today. Filox is NSF/ANSI Standard 61 Certified.

AIO Control Valve

Manufactured from fiber reinforced polymer, the AIO control valve has been engineered for durability and time tested with proven results. It controls the operation of the system including the air draw and air volume control function. The proprietary design features a polymer piston that glides through a series of seals and spacers.

This seal/spacer and piston configuration is the most reliable design in control valve technology. The valve features an electronic controller for easy programming.

Filter Tank

Features a highly corrosion resistant NSF certified fiber-glass tanks with a thermoplastic inner liner. The tanks are NSF/ANSI Standard 44 or 61 certified.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

MODEL NO.	VALVE	MINERAL TANK SIZE	MEDIA CUBIC FOOT	GRAVEL (LBS.)	SERVICE FLOW (GPM)	PRESSURE DROP (PSI)	BACKWASH (GPM)	FLOOR SPACE L X W X H
PWBIRON1	Time Clock	9" x 48"	1	14	6	<15	7	16" x 15" x 55"
PWBIRON15	Time Clock	10" x 54"	1.5	14	9	<15	8	16" x 15" x 62"
PWBIRON2	Time Clock	12" x 52"	2	42	12	<25	12	17" x 15" x 60"
PWBIRON3	Time Clock	13" x 65"	3	56	18	<25	15	18" x 15" x 74"

Note: Peak service flow rate is for intermittent use only and is not to be interpreted as continuous service flow rate capability. These systems are designed to treat the domestic water used in a single family dwelling. For irrigation water treatment or higher volume applications please contact your Watts representative.

For additional information, access online literature ES-WQ-PWBIRON

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



Whole House Water Conditioning Systems

Acidic Water Neutralizing System

Series PWBWCAL

Whole House Acidic Water Neutralizing Systems

Connection Size: 1" (25mm)

Flow Rate: Up to 15 gpm (56 lpm)

Watts Whole House System for increasing the pH of acidic water.

Series PWBWCAL acid neutralizing system are designed for residential applications with intermittent flow rates up to 15 gallons per minute. They stop the corrosion of metal components and fixtures within a plumbing system by neutralizing the acidic nature of supply water that has a pH of less than 7. Periodic backwashing of the media bed cleans it of captured impurities.

Features

- Increases the pH of acidic water
- Eliminates the corrosion of plumbing and fixtures caused by low pH water
- No more "green stain" copper deposits in tubs, toilets, and sinks
- Better tasting pH balanced water
- User-friendly equipment
- 10" diameter tanks and larger have a dome hole access port on the top for checking and adding media
- Low maintenance due to automatic operation

Media

These systems use a high quality granular calcite (calcium carbonate) media to accomplish the neutralization process. As low pH water flows down through the media bed it reacts with the calcite media and dissolves it. This causes the pH of the water to move from an acidic state to a neutral state. This dissolving of the calcite media will require calcite to be added to the bed over time.

Series Pro SE Control Valve

Manufactured from high-tech materials, the Series Pro SE control valve has been engineered and tested to withstand the equivalent of 27 years of uninterrupted daily use. The proprietary design features a Teflon® coated piston that glides through a series of seals and spacers. This seal/spacer and piston configuration is the most reliable design in valve technology. The valve features an electronic control for easy programming.

Filter Tank

Features highly corrosion resistant NSF certified fiberglass tanks with a thermoplastic inner liner. The tanks are NSF/ANSI Standard 44 or 61 certified.



PWBWCAL

MODEL NO.	VALVE	MINERAL TANK SIZE	MEDIA CUBIC FOOT	GRAVEL (LBS.)	PEAK SERVICE FLOW (GPM)	PRESSURE DROP (PSI)	BACKWASH (GPM)	FLOOR SPACE L X W X H
PWBWCAL1	Time Clock	9" X 48"	1	10	5	<15	7	16" X 10" X 55"
PWBWCAL15	Time Clock	10" X 54"	1.5	10	7	<15	7	16" X 11" X 62"
PWBWCAL2	Time Clock	12" X 52"	2	30	10	<15	10	17" X 13" X 60"
PWBWCAL3	Time Clock	13" X 65"	3	40	15	<15	15	18" X 14" X 74"

*Note: Peak service flow rate is for intermittent use only and is not to be interpreted as continuous service flow rate capability. These systems are designed to treat the domestic water used in a single family dwelling. For irrigation water treatment or higher volume applications please contact your Watts representative. Peak service flow rates are based on a 15 psi drop.

Optimum service flow rate is specific to water chemistry and will vary.

For additional information, access online literature ES-WQ-PWBWCAL.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series OFRES

Whole House OneFlow® Residential Anti-Scale Systems

Connection Size: 1" (25mm)

Flow Rate: Up to 16 gpm (60 lpm)

OneFlow® Residential Anti-Scale Systems provide a home with protection from internal hardness related scale formation on plumbing surfaces. Water using appliances and plumbing fixtures also enjoy a longer lifespan because hardness scale build up on internal parts no longer occurs.

These systems are specifically designed for residential applications. OneFlow® Residential systems should be installed at the point-of-entry to a home to treat both the hot and the cold water. OneFlow® Residential systems prevent scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to drain, thereby having a greatly reduced ability to react negatively like dissolved hardness does. These systems require very little maintenance, no backwashing, no salt, and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers, fixtures, and appliances are no longer a concern. OneFlow® Residential systems are not water softeners or chemical additives (like anti-scalants or sequestrants). They are scale prevention devices with proven third party laboratory test data and years of successful applications. OneFlow® Residential systems are the one water treatment device that effectively provides scale protection in the home and are a great alternative to water softening (ion exchange) or scale sequestering chemicals.



OFRES

Benefits

Chemical free scale prevention and protection – converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective alternative technology to a water softener for the prevention of scale due to water hardness

- Virtually maintenance free
 - No salt bags or other chemicals to constantly add
- No control valve, no electricity and no wastewater
- Uses environmentally friendly “green” technology
- Improves efficiency of all water using appliances – both hot* and cold

- Simple sizing & installation
- Perfect system for towns or communities where water softeners are banned or restricted
- OneFlow® - Residential systems do not remove minerals or add sodium to the water supply
- OneFlow® - Residential systems can be installed as a pretreatment to reverse osmosis (OneFlow® should be the last stage in treatment unless a point-of-use system is being used downstream.)
- Systems include a bypass valve for a simplified installation

***Always install OneFlow® Residential systems before the water heating device.**
Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Replacement Media

MODEL NO.	FREQUENCY
OFRES-0835RM	Media should be replaced every 3 years
OFRES-0935RM	Media should be replaced every 3 years
OFRES-1035RM	Media should be replaced every 3 years

MODEL NO.	CONNECTION SIZE	MINERAL TANK SIZE	MEDIA LITERS	MAXIMUM SERVICE FLOW (GPM)*	PRESSURE DROP (PSI)**	FLOOR SPACE (L X W X H)
OFRES-0835	1" MNPT	8" X 35"	2	8	<15	13" X 9" X 40"
OFRES-0935	1" MNPT	9" X 35"	3	12	<15	13.5" X 10" X 40"
OFRES-1035	1" MNPT	10" X 35"	4	16	<15	14" X 11" X 40"

For additional information, access online literature ES-OFRES.

Model PWSCAB30K

Space Saver 30K Cabinet Whole House Water Softening Systems

Connection Size: 1" (25mm),
Flow Rate: Up to 10 gpm (37.8 lpm)

The Water Softening Process

Hard water contains high levels of dissolved minerals, typically in the form of calcium and iron salts. Water softening reduces the hardness of water using an ion-exchange process. Hard water enters the softener, passing through the ion-exchange media where the minerals are removed by attaching to the resin media. The softened water then flows out to the fixtures. As the minerals build up on the media, the softening ability of the media gradually reduces until the softener switches to the regeneration cycle that removes the minerals from the media. Brine (salt solution) is circulated through the media and is released to drain, carrying away the hardness minerals. The softener then returns to normal operation, resuming the softening process.



PWSCAB30K

Features

- Unique, space-saving low profile design is ergonomically engineered for easy salt fill and storage capacity...holds 170 pounds of salt
- Ultra-safe 12 volt system so you don't have to worry about electrical wiring
- Built-in self-cleaning media for sediment and dirt reduction
- High-capacity, premium softening media assures maximum efficiency for hardness and clear water iron reduction
- Unique safety shutoff valve eliminates overflow
- Exclusive distribution system assures maximum contact with media
- Manufactured using only the finest materials and processes
- Set the electronic control with one button: Regenerates based on water used. No guess work, no waste. Space saving design installs under sink or in limited space

Softener Specifications

Max compensated hardness (grains)	90
Max ferrous iron reduction	10ppm
Media type and amounts	Power clean filter media Super fine mesh resin 1 cu. ft.
Salt usage (lbs.)/Capacity (HC-High Capacity)	10/30,000
Salt usage (lbs.)/Capacity (HE-High Efficiency)	5/21,200
Max water temperature	120°F (49°C)
Mineral tank size	10.5" x 21"
Peak flow rate/psi drop	10 gpm / 14.5
Pressure drop @ service flow rate of 4 gpm	4.0psi
Max flow rate to drain during regeneration (gpm)	2
Water Pressure (minimum – maximum psi)	20/120
Controller type	4 Button
Regeneration time (mins) (HC – High Capacity)	50
Regeneration time (mins) (HE – High Efficiency)	27
Water used / regeneration (gallons) (HC-High Capacity)	35
Water used / regeneration (gallons) (HE-High Efficiency)	21
Frequency of regeneration (days)	Demand
Salt Storage	170 lbs.
Height (in.)	30.5"
Footprint (in.)	15" x 26"
Electrical Rating	12 VAC, 1 Phase 60 Hz
Plumbing connections	1" MNPT
Shipping weight—approximate	115 lbs. (52kgs.)

Notes:

Capacities are based on resin manufacturer's data and are dependent upon influent water, TDS, temperature, bed depth and flow rates. Feed water must be free of oil and color. Pipe size, tank, and space requirements are in inches.

For additional information, access online literature ES-WQ-PWSCAB30K

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWSSTD

Whole House Water Softeners

Connection Size: 1" (25mm)

Flow Rate: Up to 13 gpm (49 lpm)

Our Series PWSSTD Water Softeners are designed for residential applications up to 13 gallons per minute peak flow rate. This is our most popular selling series because they are priced right and constructed of time-proven materials.

Features

- Economical
- Top quality components
- Fully assembled ready for installation
- Capacities up to 60,000 grains
- User friendly 5600 control valves
- Brine tanks with grid plates and safety floats
- 1" plumbing connections

Softening Media

Our ion exchange media is a high-capacity polystyrene resin that combines high operating capacity with excellent chemical and physical stability for a long dependable life.

Series 5600 Control Valve

The Series 5600 control valve has enjoyed years of continuous service in the water treatment industry. It is one of the longest running valve series on the market today. We use a metered initiated regeneration so that your system regenerates only when necessary with an accurately measured amount of sodium to conserve water and salt. The valve combines simplicity and durability all in one.

Resin Tank

Features a highly corrosion resistant NSF certified fiberglass tanks with a thermoplastic inner liner. The tanks are approved by NSF, UL, DA, and meet WQA standard S-100.

Brine Tank/Cabinet

The brine tank is a combination brine maker and salt storage vessel that is made of tough corrosion free polyethylene and comes with a safety float to guard against brine tank overflow issues.



PWSSTD

PWSSTD

MODEL NO.	PWSSTD30K	PWSSTD45K	PWSSTD60K
Max/Min Ion Exchange Capacity	30,000/20,000	45,000/30,000	60,000/40,000
Lbs. of salt required for Max/Min capacity	15/6	22.5/9	30/12
Salt Storage Capacity	300	300	300
Flow Rate in GPM @ 15 PSI Drop	8.8	10	10
Backwash Flow Rate GPM	2.0	2.4	3.5
Drain Line Connection Size	1/2" NPT	1/2" NPT	1/2" NPT
Inlet/Outlet Pipe Size	1"	1"	1"
Electrical Requirements	120V/60Hz	120V/60Hz	120V/60Hz
Mineral Tank Size	A-9" / B-48"	A-10" / B-54"	A-12" / B-52"
Brine Tank Size	18"D x 33"H	18"D x 33"H	18"D x 33"H
Floor space required in inches W x D	31 x 19	32 x 19	34 x 19
Approximate Shipping Weight Lbs.	112	130	190

For additional information, access online literature ES-WQ-PWSSTD.

Series PWSPSE

Pro SE Residential and Light Commercial Water Softeners

Connection Size: 1" (25mm)

Flow Rate: Up to 15.5 gpm (59 lpm)

Series PWSPSE Water Softeners are designed for residential and light commercial use applications ranging from 30,000 to 90,000 grains of hardness removal capacity at flow rates up to 15.5 gallons per minute.

Features

- Complete whole house water treatment system
- State-of-the-art computer programming to increase efficiency, save salt and water
- Uses downflow regeneration
- Demand regeneration for highest efficiency
- 5 cycles, all fully adjustable, strong durable Noryl® Valve body
- Weather resistant enclosures
- Full-Flow bypass valve included

Series Pro SE Control Valve

Manufactured from high-tech materials the Series Pro SE valve has been engineered and tested to withstand the equivalent of 27 years of uninterrupted daily use. The proprietary design features a Teflon® coated piston that works with a seal and spacer. This seal/spacer and piston configuration is the most reliable design in control valve technology.

Electronic Control

The Series Pro SE valve features an advanced electronic control for easy programming. Adjustable brining, adjustable reserve, high efficiency regeneration and simplified programming are now standard.

Softening Media

The exchange media is a high-capacity cation polystyrene resin that combines high operating capacity with excellent chemical and physical stability for long, dependable life.

Resin Tank

Features a highly corrosion resistant NSF certified fiberglass tanks with thermoplastic inner liner. The tanks are NSF/ANSI Standard 44 or 61 certified.

Brine Tank / Cabinet

The brine tank is a combination brine maker and salt storage vessel and is made of tough, corrosion free high-density polyethylene. Brine refill is controlled by the advanced electronic controller, to provide the correct amount of brine for each regeneration.



PWSPSE

PWSPSE

MODEL NO.	PWSPSE30K	PWSPSE45K	PWSPSE60K	PWSPSE90K
Max/Min Ion Exchange Capacity	30,000/20,000	45,000/30,000	60,000/40,000	90,000/60,000
Lbs. of salt required for Max/Min capacity	15/6	22.5/9	30/12	45/18
Salt Storage Capacity	300	300	300	400
Flow Rate in GPM @ 15 PSI Drop	12	13.1	14.4	15.5
Backwash Flow Rate GPM	2.0	2.4	3.5	4.0
Drain Line Connection Size	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT
Inlet/Outlet Pipe Size	1"	1"	1"	1"
Electrical Requirements	120V/60Hz	120V/60Hz	120V/60Hz	120V/60Hz
Mineral Tank Size	9"D x 48"H	10"D x 54"H	12"D x 52"H	13"D x 65"H
Brine Tank Size	18"D x 33"H	18"D x 33"H	18"D x 33"H	18"D x 40"H
Floor space required in inches W x D	31 x 19	32 x 19	34 x 19	35 x 19
Approximate Shipping Weight Lbs.	112	130	190	265

For additional information, access online literature PWSPSE

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWSTA

Twin-Alternating Water Softeners with Fleck 9100 Valves

Connection Size: 30K – 60K $\frac{3}{4}$ " (20mm), 90K – 120K 1" (25mm)

Flow Rates: Up to 15 gpm (56 lpm)

Watts Pure Water Series PWSTA Water Softening Systems are highly efficient, twin-alternating, conventional cation exchange type water softeners. They are designed to supply continuous softened water 24/7, without interruption.

Features

- High efficiency, no reserve capacity required
- Top quality components
- Up to 2 CF fully assembled, ready for installation
- Capacities up to 120,000 grains per regeneration
- Reliable electromechanical timer and meter
- $\frac{3}{4}$ " models come with a stainless steel bypass valve
- Safety brine valve with air check included

Softening Media

The exchange media is a high-capacity cation polystyrene resin that combines high operating capacity with excellent chemical and physical stability for long, dependable life.

Resin Tank

Features a highly corrosion resistant NSF certified fiberglass tanks with thermoplastic inner liner. The tanks are NSF/ANSI Standard 44 or 61 certified.

Brine Tank / Cabinet

The brine tank is a combination brine maker and salt storage vessel and is made of tough, corrosion free high-density polyethylene. Brine refill is controlled by the advanced electronic controller, to provide the correct amount of brine for each regeneration.



PWSTA

PWSTA

MODEL NO.	RESIN CU. FT. PER TANK	APP. GPG CAPACITY @ 4 LB CF	APP. GPG CAPACITY @ 15 LB CF	MINERAL TANK SIZE	BRINE TANK SIZE	DRY SALT LBS.	ESTIMATED PEAK GPM	APP. HEIGHT INCH	SHIP WT.	
								LBS.	KGS.	
PWSTA30K	1	16,000	30,000	(2) 9" x 48"	18" x 40"	400	13	60	180	82
PWSTA45K	1.5	24,000	45,000	(2)10" x 54"	18" x 40"	400	14	66	250	113
PWSTA60K	2	32,000	60,000	(2)12" x 52"	18" x 40"	400	15	64	330	150
PWSTA90K	3	48,000	90,000	(2)14" x 65"	18" x 40"	400	15	76	470	213
PWSTA120K	4	64,000	120,000	(2)16" x 65"	18" x 40"	400	15	76	625	283

For additional information, access online literature ES-WQ-PWSTA.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



Whole House Water Conditioning Systems

Ultraviolet (UV) Disinfection

Series PWUV

Watts UV Disinfection Systems

Pipe Sizes: 1/2" – 1" (15 – 25mm)

Flow Rate: Up to 12 gpm (45 lpm)

Watts Pure Water PWUV Systems are manufactured from 304 stainless steel and have an audible and visual lamp failure alarm. They are durable and well constructed, yet economically priced.



PWUV

Features

- Disinfection without chemicals
- Effective disinfection for chlorine resistant bacteria, virus and cysts
- Lamps rated for 12-month continuous service life
- Highly polished 304 stainless steel reactor chamber
- Audible and visual alarm indicating lamp failure
- Easy lamp replacement
- Available in 110V and 220V
- 30 mJ/cm² dose at specified flow rate at the end of lamp life

Applications

- Well water
- Homes
- Water systems
- Aquaculture
- Food service
- Water coolers
- RO systems

PWUV

MODEL NO.	FLOW RATE (GPM)	PIPE SIZE	DIMENSIONS (L X W X H)	ELECTRICAL	SHIPPING WEIGHT LBS. KGS.
PWUV2110	2	1/2" MNPT	18" x 6" x 5 3/8"	110-130 v / 50-60 Hz	6 3
PWUV2220	2	1/2" MNPT	18" x 6" x 5 3/8"	200-250 v / 50-60 Hz	6 3
PWUV6110	6	3/4" MNPT	25 1/2" x 6" x 5 3/8"	110-130 v / 50-60 Hz	7 3
PWUV6220	6	3/4" MNPT	25 1/2" x 6" x 5 3/8"	200-250 v / 50-60 Hz	7 3
PWUV8110	8	3/4" MNPT	32" x 8 1/4" x 3 3/4"	110-130 v / 50-60 Hz	9 4
PWUV8220	8	3/4" MNPT	32" x 8 1/4" x 3 3/4"	200-250 v / 50-60 Hz	9 4
PWUV12110	12	1" MNPT	41 1/2" x 8 1/4" x 3 3/4"	110-130 v / 50-60 Hz	17 8
PWUV12220	12	1" MNPT	41 1/2" x 8 1/4" x 3 3/4"	200-250 v / 50-60 Hz	17 8

FLOW RATE (GPM)	BULB MODEL NO.	BALLAST MODEL NO.	QUARTZ SLEEVE MODEL NO.
2	PWUVBULB2	PWUVBAL2	PWUVQS2
6	PWUVBULB6	PWUVBAL6-12	PWUVQS6
8	PWUVBULB8	PWUVBAL6-12	PWUVQS8
12	PWUVBULB12	PWUVBAL6-12	PWUVQS12

For additional information, access online literature ES-WQ-PWUV

- Mini Water Softeners
- Ice Maker Filtration (Wall Mount)
- Reverse Osmosis (Wall Mount)
- Whole House RO (Floor Mount)
- Atmospheric Tank and Pump



PWSMINI



PWICE2



PWICE3



PWR2511



PWRO440



PWTNPKG



Light Commercial Water Conditioning and RO Systems Part Number Matrix

PW RO 4401

Pure Water

System Type

S = Softener

ICE = Ice Series Ice Maker Filtration Systems

FPK = Filter Pack

RO = Reverse Osmosis System

TNK = Storage Tank Package

MEM = Membrane

System Model

Mini 4K = Mini Water Softener, 4,000 Grain Capacity

Mini 8K = Mini Water Softener, 8,000 Grain Capacity

1 = Light Commercial Ice Maker Filtration System – 2 gpm

2 = Light Commercial Ice Maker Filtration System – 3 gpm

3 = Light Commercial Ice Maker Filtration System – 4 gpm

4 = Light Commercial Ice Maker Filtration System – 4 gpm

ICE1 = All replacement cartridges for ICE1 Ice Maker Filtration System

ICE2 = All replacement cartridges for ICE2 Ice Maker Filtration System

ICE3 = All replacement cartridges for ICE3 Ice Maker Filtration System

ICE4 = All replacement cartridges for ICE4 Ice Maker Filtration System

4401 = Whole House RO 2200 gpd

4402 = Whole House RO 4400 gpd

4403 = Whole House RO 6600 gpd

165PKG = 165 Gallon Storage Tank Package

300PKG = 300 Gallon Storage Tank Package

500PKG = 500 Gallon Storage Tank Package

150 = 150 Gallon per Day Membrane

300 = 300 Gallon per Day Membrane

600 = 600 Gallon per Day Membrane

2200 = 2200 Gallon per Day Membrane

Series PWSMINI

Commercial and Residential Systems

Sizes: 4K and 8K

Watts Pure Water Mini Water Softeners can be used for industrial tea or espresso machines and steamers or as a pretreatment for small reverse osmosis units for the home and office.

Watts Pure Water 4K and 8K mini water softeners eliminate the problems caused by hard water on tea and espresso equipment, and greatly enhance the quality of the finished product.

Watts offers two sizes of mini water softeners for the removal of CaCO₃ (hardness) from the incoming feed water supply. The Mini water softener is designed to prevent scale build-up due to hard water.



PWSMINI4K



PWSMINI8K

Features

- Easy to install
- Simple to recharge
- NSF listed pressure vessel
- High-quality, food-grade softening resin
- Low maintenance cost.
- Reducing bushing included
- Eliminates cloudy iced tea
- Eliminates limescale build-up in tea and espresso machines.
- Reduces maintenance on tea, espresso and steamer equipment.
- Better tasting coffee and tea

For additional information, access online literature ES-WQ-PWSMINI

Model PWICE1

Light Commercial Ice Maker Filtration Systems

Maximum Flow Rate: 2 gpm (7.6 lpm)

Watts Pure Water Model PWICE1 has been engineered to address and correct multiple common water related problems both efficiently and economically in light commercial applications for ice machines.

Applications

- Ice Machines

Features

- Reduces lime scale build-up in ice machines
- Reduces maintenance—lower maintenance costs
- Better tasting ice and drinks
- Easy to install
- Simple filter replacement
- In/Out valves allow for easy filter service
- Gauges and flush kit included

System Specifications

Maximum Pressure:
125psi/8.6 bar

Maximum Temperature:
100°F/38°C

Inlet/Outlet Connections:
½" FNPT

Maximum Flow Rate: 2 gpm

Filter Cartridge Life Span

Filter cartridges should be changed at 6,000 gallons, 15psi over all system pressure drop at normal flow rate, or 6 months. Whichever comes first.

Please note: Cartridge capacities are estimates and may be less depending on incoming water quality. Cartridges should be changed at least every 6 months.



PWICE1

Replacement Filter Pack- includes all filters

MODEL NO.	FREQUENCY	DESCRIPTION
PWFPIKE1	6 Months	10" Sediment filter 10" Carbon Block filter 10" Polyphosphate filter

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWICE1

Model PWICE2

Light Commercial Ice Maker Filtration Systems

Maximum Flow Rate: 3 gpm (11 lpm)

Watts Pure Water Model PWICE2 has been engineered to address and correct multiple common water related problems both efficiently and economically in light commercial applications for ice machines.

Applications

- Ice Machines

Features

- Reduces lime scale build-up in ice machines
- Reduces maintenance – lower maintenance costs
- Better tasting ice and drinks
- Easy to install
- Simple filter replacement
- In/Out valves allow for easy filter service
- Gauges and flush kit included

System Specifications

Maximum Pressure:
125psi/8.6 bar

Maximum Temperature:
100°F/38°C

Inlet/Outlet Connections:
½" FNPT

Maximum Flow Rate: 3 GPM

Filter Cartridge Life Span

Filter cartridges should be changed at 10,000 gallons, 15psi over all system pressure drop at normal flow rate, or 6 months. Whichever comes first.

Please note: Cartridge capacities are estimates and may be less depending on incoming water quality. Cartridges should be changed at least every 6 months.



PWICE2

Replacement Filter Pack- includes all filters

MODEL NO.	FREQUENCY	DESCRIPTION
PWFPIKE2	6 Months	10" Sediment filter 20" Carbon Block filter 10" Polyphosphate filter

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWICE2.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Model PWICE3

Light Commercial Ice Maker Filtration Systems

Maximum Flow Rate: 4 gpm (15 lpm)

Watts Pure Water Model PWICE3 has been engineered to address and correct multiple common water related problems both efficiently and economically in light commercial applications for ice machines and drink stations. Water for tea, coffee, and soft drinks is filtered by the triple filter. This filtered water then feeds the remote ice filter for dedicated treatment of the ice machine.

Applications

- Ice Machines

Features

- Reduces lime scale build-up in ice machines and soda machines
- Reduces maintenance—lower maintenance costs
- Better tasting ice and drinks
- Easy to install
- Simple filter replacement
- In/Out valves allow for easy filter service
- Gauges and flush kit included
- Improves the taste of coffee, tea and soft drinks

System Specifications

Maximum Pressure: 125psi/8.6 bar
 Maximum Temperature: 100°F/38°C
 Inlet/Outlet Connections: ½" FNPT
 Maximum Flow Rate: 4 gpm

Filter Cartridge Life Span

Filter cartridges should be changed at 10,000 gallons, 15psi over all system pressure drop at normal flow rate, or 6 months. Whichever comes first.



PWICE3

Please note: Cartridge capacities are estimates and may be less depending on incoming water quality. Cartridges should be changed at least every 6 months.

Replacement Filter Pack- includes all filters

MODEL NO.	FREQUENCY	DESCRIPTION
PWFPIKCE3	6 Months	10" Sediment filter 20" Carbon Block filter (2 required) 10" Polyphosphate filter

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWICE3.

Model PWICE4

Light Commercial Ice Maker Filtration Systems

Flow Rate: Maximum 4 gpm (15 lpm)

Watts Pure Water Model PWICE4 has been engineered to address and correct multiple common water related problems both efficiently and economically in light commercial applications for ice machines and drink stations. Water for tea, coffee, and soft drinks is filtered by the triple filter. This filtered water then feeds the remote ice filters for dedicated treatment of the ice machine.

Applications

- Ice Machines
- Soda Machines
- Tea Machines
- Espresso Machines

Features

- Reduces lime scale build-up in ice machines
- Reduces maintenance—lower maintenance costs
- Better tasting ice and drinks
- Easy to install
- Simple filter replacement
- In/Out valves allow for easy filter service
- Gauges and flush kit included
- Improves the taste of coffee, tea and soft drinks

System Specifications

Maximum Pressure: 125psi/8.6 bar
 Maximum Temperature: 100°F/38°C
 Inlet/Outlet Connections: ¾" FNPT with ½" FNPT
 Maximum Flow Rate: 4 gpm

Filter Cartridge Life Span

Filter cartridges should be changed at 20,000 gallons, 15psi over all system pressure drop at normal flow rate, or 6 months. Whichever comes first.



PWICE4

Replacement Filter Pack- includes all filters

MODEL NO.	FREQUENCY	DESCRIPTION
PWFPIKCE4	6 Months	10" Sediment filter 20" Carbon Block filter (2 required) 10" Polyphosphate filter (2 required)

Note: Water conditions may require more frequent cartridge replacement

For additional information, access online literature ES-WQ-PWICE4.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWR2511

Commercial Reverse Osmosis Systems

Flow Rates: Up to 1,200 gallons per day (4,542 lpd)

Watts Pure Water Series PWR2511 Reverse Osmosis (RO) Systems are commercial grade high-pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 150 to 1,200 gallons per day. The standard units are designed for wall mounting. Where floor mounting is preferred the optional floor mounting kit Model No. PWR2864 can be specified. Reverse osmosis is a process where high-pressure feed water is fed into a semi-permeable membrane chamber. In the chamber, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high-rejection membranes to achieve a minimum average NaCl ionic rejection of 95 percent.

Series PWR2511 RO systems are a rugged, well-designed line of purifiers. This series comes with a pre-selected assortment of features for monitoring and operation. Stainless steel membrane housings, inlet and outlet pre-filter pressure gauges, low pressure switch with delayed auto restart, permeate pressure switch, adjustable reject recycle, permeate and reject water flow meters, permeate water check valve, inlet solenoid valve, membrane feed water pressure gauge, adjustable reject valve, and membrane auto flush are all standard features. The standard systems are designed to feed an atmospheric storage tank or a pressurized bladder tank. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

Features

- 304 stainless steel wall mounted support frame
- 316L stainless steel 300psi high-pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet and membrane feed pressure
- Low feed water pressure safety switch
- Microprocessor based controller with delayed auto restart after low pressure shut down
- High-pressure/high-rejection membranes with 95% minimum average salt rejection
- Permeate and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate pressure switch and check valve
- Automatic inlet solenoid valve
- Membrane auto flush

Standards

- Pre-filter Housing NSF/ANSI Certified 42
- Pre-filter Cartridge NSF/ANSI Certified 42

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.



PWR2511



Series PWR2511

Commercial Reverse Osmosis Systems

Ordering Information

MODEL NO.	DESCRIPTION
PWR25111011	150 Gallon Per Day Reverse Osmosis System With Auto Flush
PWR25112011	250 Gallon Per Day Reverse Osmosis System With Auto Flush
PWR25113011	600 Gallon Per Day Reverse Osmosis System With Auto Flush
PWR25113021	1200 Gallon Per Day Reverse Osmosis System With Auto Flush
PWR2864	Optional Stainless Steel Leg Kit For All Models

Performance

Maximum Productivity (gallons per day)	150	250	600	1200
Quality (average membrane rejection)	98 %	98 %	98 %	98 %
Recovery (user adjustable)	15 - 75 %	15 - 75%	15 - 75 %	25 - 75 %
Membrane Size	2.5" x 14"	2.5" x 21"	2.5" x 40"	2.5" x 40"
Number Of Membranes	1	1	1	2
Prefilter (system ships with one 5-micron cartridge)		10"		
Feed Water Connection		½" NPT		
Product Water Connection (tubing OD)		¾"		
Reject Water Connection (tubing OD)		¾"		
Feed Water Required (maximum)		2.4 gpm		
Feed Water Pressure (minimum)		20 psi		
Drain Required (maximum)		2.4 gpm		
Electrical Requirement		120 VAC 60 Hz 8 amps		
Motor Horse Power		½		
Dimensions W x H x D (approximate)	22" x 32" x 12"		22" x 52" x 12"	
Shipping Weight (estimated pounds)	50	50	60	70

For additional information, access online literature ES-WQ-PWR2511

Series PWRO440

Whole House Reverse Osmosis Systems Floor Mount

Connection Size: $\frac{3}{4}$ " (20mm)

Max. Productivity: 2200, 4400 and 6600 gallons per day

Watts Pure Water Whole House Floor Mount Reverse Osmosis System with adjustable recovery. The Series PWRO440 uses advanced design with state-of-the art technologies and high-quality components to assure years of trouble-free performance. Includes many standard features that are only available as options on other reverse osmosis systems.

Features

- Powder coated steel frame
- Inlet solenoid valve
- 20" prefilter
- Prefilter pressure gauge
- Multistage centrifugal pump
- Low-pressure protection with microprocessor auto reset
- Tank level input (dry contact)
- Pretreatment interlock input (dry contact)
- 2 $\frac{1}{2}$ " liquid filled pump pressure gauge
- Stainless steel pressure vessel(s)
- Product flow meter
- Reject flow meter
- Concentrate needle valve
- Non-metallic recycle needle valve
- Feed water and product water TDS monitor

Added Capabilities

- Input for auto shutoff when storage tank is full
- Input for auto shutoff when pre-treatment is in regeneration

Applications

- Whole house
- Boiler feed water
- Humidifiers
- Greenhouses
- Process water
- Electronics
- Car wash spot-free

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.



PWRO440

Note: For indoor installation only.

Performance

	PWR04401	PWR04402	PWR04403
Maximum Productivity (gallons per day) / (lpm)	2200 / 8328	4400 / 16,656	6600 / 24,984
Recovery (user adjustable)	15 - 75%	25 - 75%	32 - 75%
Replacement Pre-Filter	PWMB20M5		
Number of Membranes	1	2	3
Replacement Membrane	PWMEM2200		
Feed Water Required (maximum)	10 gpm (38 lpm)	12 gpm (45 lpm)	14 gpm (53 lpm)
Drain Required (maximum)	10 gpm (38 lpm)	12 gpm (45 lpm)	14 gpm (53 lpm)
Motor Horse Power	$\frac{3}{4}$	1	$1\frac{1}{2}$
Electrical Requirement	10 amps	12 amps	15 amps
Dimensions W x D x H	20" x 20" x 50" (600 x 600 x 1270mm)	20" x 20" x 50" (600 x 600 x 1270mm)	20" x 26" x 50" (600 x 600 x 1270mm)
Shipping Weight (estimated lbs.)	120 lbs. / 54 kgs.	150 lbs. / 68 kgs.	180 lbs. / 82 kgs.

Notes:

Maximum production based on a feed water of 77°F, SDI < 1, 1000 ppm TDS, and pH 7. Individual membrane productivity may vary ($\pm 15\%$). May be operated on other feed waters with reduced capacity. Percent rejection is based on membrane manufacturer's specifications; overall system percent rejection may be less.

For additional information, access online literature ES-WQ-PWRO440.

Series PWTNPKPG

Atmospheric Tank and Pump Systems

Sizes: 165, 300, 500 gallons (625, 1135, 1893 liters)

Ideal for whole house and light commercial applications. Reduce installation labor with these complete tank and pump packages with components pre-installed to save time and money.

Grundfos® MQ3 Pump

This unique pump is included in the package for re-pressurization. It is a stand alone component, operating independently. Simply plug it in directly to a 110 VAC outlet and the pump turns itself on and off and adjusts speed based on flow.



PWTNPKPG

Features

- Pre-installed float switch
- Polyethylene atmospheric storage tanks with float switch
- Atmospheric storage tank with bulkhead fittings installed
- Junction box connects to the float switch RO system
- UV inhibitors added to storage tank
- Storage tank manufactured from sturdy polyethylene
- Tank walls are translucent for level viewing
- Gallon indicators on side wall
- Basic installation fittings included from storage tank to pump (additional fittings and pipe may be required depending upon application).

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.



Pre Installed Float Switch

MODEL NO.	TANK SIZE GALLONS	FLOAT SWITCH AND JUNC- TION BOX	BULKHEAD FITTINGS	OVERFLOW	PUMP
PWTNPK165PKG	165	Installed	Installed	Installed	Grundfos® MQ3
PWTNPK300PKG	300	Installed	Installed	Installed	Grundfos® MQ3
PWTNPK500PKG	500	Installed	Installed	Installed	Grundfos® MQ3

Replacement Commercial RO Membranes

MODEL NO.	GPD	DESCRIPTION	QUANTITY PER CARTON
PWMEM150	150	2½" x 14" Commercial Membrane	1
PWMEM300	300	2½" x 21" Commercial Membrane	1
PWMEM600	600	2½" x 40" Commercial Membrane	1
PWMEM2200	2200	4" x 40" Commercial Membrane	1

For additional information, access online literature ES-WQ-PWTNPKPG

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



- Systems for Scale Control
- Systems for Chlorine, Taste and Odor
- Systems for Sediment Reduction with High Efficiency Micro Z™ Filter Media
- Water Softeners
- Reverse Osmosis



OF220-2



OF1465C



PWC10

PWC30



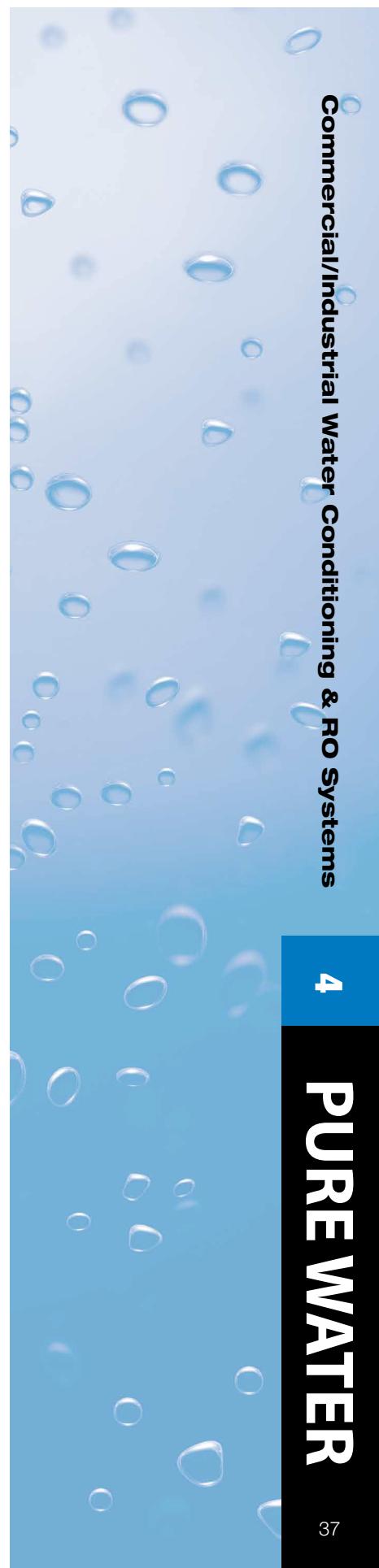
PWS10



PWS20-2



PWR4021



Models OF110-1, OF120-2 and OF140-4

OneFlow® Anti-Scale System

Connection Sizes: 1/2" and 3/4" (15 and 20mm)

Flow Rates: From 0.5 gpm to 4 gpm (1.9 lpm to 15.2 lpm)

The OneFlow® Anti-Scale System provides protection from scale formation on internal and external plumbing surfaces. The OneFlow® system is a single cartridge-based system that may be installed on a cold water line prior to a water-using device (water heater, hot-beverage system, appliance, steamer etc.) that requires protection from the ill effects of hard water.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to a drain, thereby having a greatly reduced ability to react negatively with plumbing surfaces, as opposed to dissolved hardness minerals. The system requires very little maintenance, no backwashing, no salt and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers and on fixtures are no longer a concern.

OneFlow® is not a water softener. It does not add chemicals. It is a scale prevention device with proven third party laboratory test data and years of successful Food Service and Commercial applications. OneFlow® is the intelligent scale solution and is a great alternative to water softening (ion exchange) or scale sequestering devices.

Features

- Chemical free scale prevention and protection - converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective alternative technology to a water softener for the prevention of scale due to water hardness
 - Virtually maintenance free
 - No salt bags or other chemicals to constantly add or maintain
 - No control valve, no electricity and no wastewater
- Uses environmentally friendly "green" technology
 - Improves efficiency of all water appliances whether heating the water or not
 - Simple sizing & installation – all you need to know is pipe size and flow rate
 - Perfect system for restaurants, cafeterias and coffee shops where multiple or single equipment protection is desired for longer equipment life and reduced energy consumption
- Inlet ball valve for easy isolation shutoff and filter changes
 - OneFlow® does not remove the essential minerals in water
 - OneFlow® cartridge-based systems are easily maintained; change the cartridge once per year



OF110-1



OF120-2



OF140-4

Models

MODEL NO.	MAXIMUM FLOW RATE	CONNECTION SIZES
OF110-1	1 gpm (4 lpm)	1/2" (15mm) FNPT
OF120-2	2 gpm (8 lpm)	1/2" (15mm) FNPT
OF140-4	4 gpm (15 lpm)	3/4" (20mm) FNPT

Replacement Filters

MODEL NO.	FREQUENCY
OF110RM	Cartridge should be replaced every 12 months
OF120RM	Cartridge should be replaced every 12 months
OF140RM	Cartridge should be replaced every 12 months

For additional information, access online literature ES-OF110_120_140

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Models OF210-1, OF220-2 and OF240-4

OneFlow® Anti-Scale System

Connection Sizes: 1/2" and 3/4" (15 and 20mm)

Flow Rates: From 0.5 gpm to 4 gpm (1.9 lpm to 15.2 lpm)

The OneFlow® Anti-Scale System with two filter housings provides protection from scale formation and reduces chlorine and other off tastes to improve overall water quality in Food Service applications. The OneFlow® system is a dual cartridge-based system that may be installed on a cold water line prior to a water-using device (coffee maker, espresso machine, post-mix system or other appliance) that requires protection from the ill effects of hard water. OneFlow® works exceptionally well where the water is being heated or brought to steam.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to a drain, thereby having a greatly reduced ability to react negatively with plumbing surfaces, as opposed to dissolved hardness minerals. The system requires very little maintenance, no backwashing, no salt, and no electricity. Typical hardness problems, especially build-up of scale in heating elements, boilers, and steamers, are no longer a concern.

OneFlow® is not a water softener. It does not add chemicals or remove any minerals. It is a scale prevention device with proven third party laboratory test data and years of successful Food Service and Commercial applications. OneFlow® is the intelligent scale solution with chlorine reduction as a great alternative to water softening (ion exchange) or scale sequestering devices.

Features

- Chemical free scale prevention and protection - converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® effective alternative technology to a water softener for the prevention of scale due to water hardness and for the reduction of chlorine for better taste and odor
- Virtually maintenance free
 - No salt bags or other chemicals to constantly add or maintain
- No control valve, no electricity and no wastewater

- Uses environmentally friendly "green" technology
- Improves efficiency of all water appliances whether heating the water or not
- Simple sizing & installation – all you need to know is pipe size and flow rate
- Perfect system for restaurants, cafeterias and coffee shops where multiple or single equipment protection is desired for longer equipment life and reduced energy consumption
- Inlet ball valve for easy isolation shutoff and filter changes

- OneFlow® does not remove the essential minerals in water
- OneFlow® cartridge-based systems are easily maintained; change the carbon cartridge every 6 months and the OneFlow® media cartridge once per year.



OF210-1



OF220-2



OF240-4

Models

MODEL NO.	MAXIMUM FLOW RATE	CONNECTION SIZES
OF210 - 1	1 gpm (4 lpm)	1/2" (15mm) FNPT
OF220 - 2	2 gpm (8 lpm)	1/2" (15mm) FNPT
OF240 - 4	4 gpm (15 lpm)	3/4" (20mm) FNPT

Replacement Filters

MODEL NO.	FREQUENCY
OF110RM	Cartridge should be replaced every 12 months
OF120RM	Cartridge should be replaced every 12 months
OF140RM	Cartridge should be replaced every 12 months
OF110RC	Cartridge should be replaced every 6 months
OF120RC	Cartridge should be replaced every 6 months
OF140RC	Cartridge should be replaced every 6 months

For additional information, access online literature ES-OF210_220_240

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Model OFTWH

OneFlow® Anti-Scale System

Connection Sizes: $\frac{3}{4}$ " (20mm)

Flow Rates: From 0.5 gpm to 10 gpm (1.9 lpm to 38 lpm)

The OneFlow® Anti-Scale System provides protection from scale formation on internal and external plumbing surfaces. The OneFlow® system is a single cartridge-based system that must be installed on a cold water line prior to a water-heating device (water heater or tankless water heater) for single tankless heaters.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to a drain. The system requires very little maintenance, no backwashing, no salt and no electricity. Typical hardness problems, especially build-up of scale in heating elements, pipes, water heaters, boilers and on fixtures are no longer a concern.

OneFlow® is not a water softener. It does not add chemicals. It is a scale prevention device with proven third party laboratory test data and years of successful commercial, residential and food service applications. OneFlow® is the intelligent scale solution and is a great alternative to water softening (ion exchange) or scale sequestering devices.

Features

- Chemical-free scale prevention and protection - converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free
 - No salt bags or other chemicals to constantly add or maintain
- No control valve, no electricity and no wastewater
- Uses environmentally friendly "green" technology
- Improves efficiency of all water heating devices and downstream plumbing components.
- Simple sizing & installation – standard $\frac{3}{4}$ " connections

- Perfect system for restaurants, cafeterias, coffee shops and homes where multiple or single equipment protection is desired for longer equipment life and reduced energy consumption
- Inlet ball valve for easy isolation shutoff and filter changes
- OneFlow® cartridge-based systems are easily maintained; change the cartridge once every two years
- Easily installed mounting bracket included w/filter wrench to allow cartridge change-outs when necessary



Models

MODEL NO.	PEAK FLOW RATE	CONNECTION SIZE
OFTWH	10 gpm (38 lpm)	$\frac{3}{4}$ " (20mm) FNPT

Replacement Cartridge

MODEL NO.	FREQUENCY
OFTWHRM	Cartridge should be replaced every 2 YEARS.

For additional information, access online literature ES-OFTWH

Models OF744-10, OF844-12, OF948-16, OF1054-20 and OF1252-30

OneFlow® Anti-Scale System

Connection Sizes: ¾", 1" and 1¼" (20, 25, 32mm)

Flow Rates: 5 gpm to 30 gpm (38 lpm to 144 lpm)

The OneFlow® Anti-Scale System provides protection from scale formation on internal and external plumbing surfaces. The OneFlow® system may be installed at the point-of-entry to a building to treat both hot* and cold water, or it can be located directly before a water heater, boiler, or other hot water-using device that requires protection from the ill effects of hard water.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to a drain, thereby having a greatly reduced ability to react negatively like dissolved hardness minerals does. The system requires very little maintenance, no backwashing, no salt, and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers and on fixtures are no longer a concern.

OneFlow® is not a water softener or a chemical additive (like anti-scalants or sequestrants). It is a scale prevention device with proven third party laboratory test data and years of successful residential and commercial applications. OneFlow® is the one water treatment device that effectively provides scale protection and is a great alternative to water softening (ion exchange) or scale sequestering chemicals.

Features

- Chemical free scale prevention and protection – converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® effective alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free – No salt bags or other chemicals to constantly add
- No control valve, no electricity and no wastewater
- Uses environmentally friendly “green” technology
- Improves efficiency of all water using appliances – both hot** and cold
- Simple sizing & installation – all you need to know is pipe size and the peak flow rate
- Perfect system for towns or communities where water softeners are banned or restricted
- OneFlow® does not remove minerals or add sodium to the water supply
- OneFlow® can be installed as a pre-treatment to reverse osmosis (OneFlow® should be the last stage in treatment unless a point-of-use system is being used downstream.)



OF744-10 OF844-12 OF948-16



OF1054-20 OF1252-30

Models

MODEL NO.	MAXIMUM FLOW RATE	CONNECTION SIZES
OF744-10	10 gpm (38 lpm)	¾", 1" or 1¼" (19, 25, 32mm)
OF844-12	12 gpm (45.4 lpm)	¾", 1" or 1¼" (19, 25, 32mm)
OF948-16	16 gpm (60.8 lpm)	¾", 1" or 1¼" (19, 25, 32mm)
OF1054-20	20 gpm (76 lpm)	¾", 1" or 1¼" (19, 25, 32mm)
OF1252-30	30 gpm (114 lpm)	¾", 1" or 1¼" (19, 25, 32mm)

Connection Options

¾" and 1" Sweat (19 and 25mm)

1" and 1¼" Plastic MPT (25 and 32mm)

Replacement Media

MODEL NO.	FREQUENCY
OF744RM	Media should be replaced every 3 years
OF844RM	Media should be replaced every 3 years
OF948RM	Media should be replaced every 3 years
OF1054RM	Media should be replaced every 3 years
OF1252RM	Media should be replaced every 3 years

** For hot water applications where water temperature is 110°F – 150°F (43°C – 66°C), please consult ES-OneFlow-HotWater

For additional information, access online literature ES-OF744_844_948_1054_1252

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Models OF1465-50 and OF1665-75

OneFlow® Anti-Scale System

Connection Sizes: 2" (50mm)

Flow Rates: From 30 gpm to 450 gpm (114 lpm to 1703 lpm)

The OneFlow® Anti-Scale System provides protection from scale formation on internal and external plumbing surfaces. The OneFlow® system may be installed at the point-of-entry to a building to treat both hot* and cold water, or it can be located directly before a water heater, boiler, or other hot water-using device that requires protection from the ill effects of hard water.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles, as water travels through the media filled tank. These precipitated micro-crystals stay suspended in the water and are passed to a drain, thereby having a greatly reduced ability to react negatively like dissolved hardness minerals do. The system requires very little maintenance, no backwashing, no salt, and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers and on fixtures are no longer a concern.

OneFlow® is not a water softener or a chemical additive (like anti-scalants or sequestrants). It is a scale prevention device with proven third party laboratory test data and years of successful residential and commercial applications. OneFlow® is the one water treatment device that effectively provides scale protection and is a great alternative to water softening (ion exchange) or scale sequestering chemicals.

Features

- Chemical-free scale prevention and protection – converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free – No salt bags or other chemicals to constantly add
- No control valve, no electricity and no wastewater
- Uses environmentally friendly “green” technology
- Improves efficiency of all water using appliances – both hot** and cold
- Simple sizing & installation – all you need to know is pipe size and the peak flow rate
- Perfect system for towns or communities where water softeners are banned or restricted
- Manifold assemblies for easy installation of multi-tank, high-flow applications (Can be operated in parallel for full-flow applications.)
- OneFlow® does not remove minerals or add sodium to the water supply
- OneFlow® can be installed as pre-treatment to reverse osmosis (OneFlow® should be the last stage in treatment unless a point-of-use system is being used downstream.)



OF1465

Models

MODEL NO.	MAXIMUM FLOW RATE
OF1465-50	50 gpm (189.3 lpm)
OF1665-75	75 gpm (283.9 lpm)

Connections

Inlet Connection	2" (50mm) PVC Union with 90° Socket
Outlet Connection	2" (50mm) PVC Socket

Replacement Media

MODEL NO.	FREQUENCY
OF1465RM	Media should be replaced every 3 years
OF1665RM	Media should be replaced every 3 years

** For hot water applications where water temperature is 110°F – 150°F (43° – 66°C), please consult ES-OneFlow-HotWater

For additional information, access online literature ES-OF1465_1665

Series PWC

Commercial Carbon Filter Systems

Connection Sizes: 1" to 3" (25 - 80mm)

Flow Rates: Up to 129 gpm (488 lpm)

Watts Pure Water Series PWC Activated Carbon Filters are highly effective backwashing media filtration systems for the removal of chlorine as well as taste, odor, and color caused by organics, from water.

They are suitable for commercial applications with dechlorination flow rates up to 129 gallons per minute with media bed sizes ranging from 1 to 35 cubic feet in size. If higher flow rates are required multiple units can be installed in parallel. The media bed is cleaned of captured sediment by periodic backwashing and flushing. This cleaning cycle is time clock demand initiated and can be programmed to occur at any time that is convenient for the user. All steps of the cleaning cycle as well as returning to service are fully automatic and do not require manual actuation.

Watts Pure Water Series PWC activated carbon filters are designed for point of use or point of entry applications where dechlorinated water is required. Chlorine, an oxidizing agent, is added to municipal water to destroy micro-organisms. Chlorine causes the destruction of reverse osmosis membranes and polymer based ion exchange resins. Chlorine also causes objectionable tastes and odors in certain applications. Activated carbon in general is used for dechlorination, removal of taste, color, and odor caused by organics, as well as trace hydrocarbon removal from water. For applications involving trace hydrocarbon removal or taste, color, and odor removal due to organics, consult your Watts representative for proper sizing and carbon selection. Watts Series PWC activated carbon filters utilize 12x40 mesh coconut shell carbon granules which are tailored for chlorine removal. Coconut shell carbon media has a high micro-porosity which makes it ideally suited for the removal of low molecular weight contaminants such as chlorine. Another advantage of this carbon is its superior hardness, which combined with a de-dusting process in its production, creates an exceptionally clean product with low fines.

These systems are ideal for food and bottled water processing, restaurant drink station water treatment, commercial ice production, soft drink water processing, reverse osmosis pretreatment, ion exchange resin pretreatment, and general dechlorination of municipal water.

Features

- WQA Certified fully automatic time clock initiated control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable backwash and flush cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- High surface area with a minimum of 1,050 m²/g, low carbon fines, coconut shell carbon
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

- Control Valve- WQA Certified to NSF/ANSI Std. 61
- Mineral Tank- NSF Certified to ANSI Std. 44 or 61





Ordering Information

MODEL NO.	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT
PWC10111A10	1 Cubic Foot Carbon Filter with Auto Backwash	1"	10" x 11" x 60"	90 lbs.
PWC10111B10	1.5 Cubic Foot Carbon Filter with Auto Backwash	1"	11" x 12" x 65"	105 lbs.
PWC10111C10	2 Cubic Foot Carbon Filter with Auto Backwash	1"	13" x 14" x 65"	117 lbs.
PWC10111D10	3 Cubic Foot Carbon Filter with Auto Backwash	1"	15" x 16" x 75"	194 lbs.
PWC15121E10	4 Cubic Foot Carbon Filter with Auto Backwash	1½"	17" x 18" x 75"	254 lbs.
PWC15121G10	7 Cubic Foot Carbon Filter with Auto Backwash	1½"	23" x 24" x 84"	471 lbs.
PWC20141H10	10 Cubic Foot Carbon Filter with Auto Backwash	2"	27" x 27" x 95"	735 lbs.
PWC20141I10	15 Cubic Foot Carbon Filter with Auto Backwash	2"	33" x 33" x 95"	1432 lbs.
PWC30151J10	20 Cubic Foot Carbon Filter with Auto Backwash	3"	40" x 48" x 114"	1965 lbs.
PWC30151K10	30 Cubic Foot Carbon Filter with Auto Backwash	3"	46" x 54" x 114"	3038 lbs.
PWC30151L10	35 Cubic Foot Carbon Filter with Auto Backwash	3"	52" x 60" x 114"	3645 lbs.

Specifications

MODEL NO.	MINERAL TANK			FLOW RATES FOR SERVICE AND BACKWASH		
	TANK SIZE	CARBON FT ³	UNDERBED 1/2 X 1/4 - 1/4 X 1/8 - #20	SERVICE GPM	CHLORINE REDUCTION	BACKWASH GPM
PWC10111A10	9" x 48"	1.0	- / - / 10 lbs.	3.7 GPM		4.0 GPM
PWC10111B10	10" x 54"	1.5	- / - / 10 lbs.	5.5 GPM		5.0 GPM
PWC10111C10	12" x 52"	2.0	- / - / 30 lbs.	7.4 GPM		7.0 GPM
PWC10111D10	14" x 65"	3.0	- / - / 60 lbs.	11.1 GPM		10 GPM
PWC15121E10	16" x 65"	4.0	- / - / 80 lbs.	14.8 GPM		12 GPM
PWC15121G10	21" x 62"	7.0	- / - / 100 lbs.	25.9 GPM		26 GPM
PWC20141H10	24" x 72"	10	- / 100 lbs. / 100 lbs.	37 GPM		30 GPM
PWC20141I10	30" x 72"	15	- / 200 lbs. / 200 lbs.	55.5 GPM		50 GPM
PWC30151J10	36" x 72"	20	- / 300 lbs. / 200 lbs.	74 GPM		70 GPM
PWC30151K10	42" x 72"	30	- / 400 lbs. / 200 lbs.	111 GPM		90 GPM
PWC30151L10	48" x 72"	35	500 lbs. / 500 lbs. / 500 lbs.	129.5 GPM		100 GPM

For additional information, access online literature ES-WQ-PWC

Systems for Sediment Reduction with High Efficiency
 Micro Z™ Filter Media

Series PWM

Commercial Micro Z™ Filter Systems

Connection Sizes: 1" to 3" (25 - 80 mm)

Flow Rates: Up to 106 gpm (401 lpm)

Watts Pure Water Series PWM Micro Z™ Filters are highly effective backwashing media filtration systems for the removal of sediment and suspended solids from water.

They are suitable for commercial applications with flow rates up to 106 gallons per minute with media bed sizes ranging from 1 to 20 cubic feet in size. If higher flow rates are required multiple units can be installed in parallel. The media bed is cleaned of captured sediment by periodic backwashing and flushing. This cleaning cycle is time clock demand initiated and can be programmed to occur at any time that is convenient for the user. All steps of the cleaning cycle as well as returning to service are fully automatic and do not require manual actuation.

Watts Pure Water Series PWM Sediment Filters are designed for point of use or point of entry applications where filtered water is required. Micro Z™ is a naturally occurring form of Zeolite that offers superior filtration characteristics over and above sand, anthracite, and garnet products currently in use today. The key to Micro Z™'s performance is its hydrophilic properties combined with a jagged external surface texture. This gives Micro Z™ a sediment holding capacity of 2.8 times that of sand, which reduces backwash waste water volumes, and higher service flow rates which reduces over all system size and cost. Micro Z™ has a 3-5 micron nominal particle size removal rating versus 15-30 micron with other conventional back-washable medias.

Reverse osmosis pretreatment, micro and ultra filtration system pretreatment, cartridge filtration pre-treatment, sediment reduction in city and rural water, municipal water filtration, as well as general turbidity reduction are all common applications for the Watts Pure Water Series PWM Micro Z™ filter systems.

Filtered water is a cleaner supply water for boilers, solenoid valves, pumps, faucets, aerator screens, reverse osmosis systems, micro and ultra filtration systems, pools, aquariums, washing, and rinsing processes that reduces down time and costly repairs.

Features

- WQA Certified fully automatic time clock initiated control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable backwash and flush cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- NSF Certified high capacity Micro Z™ filter media
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

- Control Valve- WQA Certified to NSF/ANSI Std. 61
- Micro Z™ Filter Media- NSF Certified to ANSI Std. 61
- Mineral Tank- NSF Certified to ANSI Std. 44 or 61





Commercial/Industrial Water Conditioning & RO Systems

Systems for Sediment Reduction with High Efficiency Micro Z™ Filter Media

Ordering Information

MODEL NO.	DESCRIPTION	PIPE SIZE	SPACE REQUIRED		WEIGHT
			W	D X H	
PWM10111A10	1 Cubic Foot Micro Z™ filter with Auto Backwash	1"	10"	x 11" x 60"	118 lbs.
PWM10111B10	1.5 Cubic Foot Micro Z™ filter with Auto Backwash	1"	11"	x 12" x 6"5	147 lbs.
PWM10111C10	2 Cubic Foot Micro Z™ filter with Auto Backwash	1"	13"	x 14" x 65"	173 lbs.
PWM15121D10	3 Cubic Foot Micro Z™ filter with Auto Backwash	1½"	15"	x 16" x 75"	278 lbs.
PWM15121E10	4 Cubic Foot Micro Z™ filter with Auto Backwash	1½"	17"	x 18" x 75"	366 lbs.
PWM15121G10	7 Cubic Foot Micro Z™ filter with Auto Backwash	1½"	23"	x 24" x 84"	667 lbs.
PWM20141H10	10 Cubic Foot Micro Z™ filter with Auto Backwash	2"	27"	x 27" x 95"	1015 lbs.
PWM20141I10	15 Cubic Foot Micro Z™ filter with Auto Backwash	2"	33"	x 33" x 95"	1852 lbs.
PWM30151J10	20 Cubic Foot Micro Z™ filter with Auto Backwash	3"	40"	x 48" x 114"	2525 lbs.

Specifications

MODEL NO.	MINERAL TANK			FLOW RATES FOR SERVICE AND BACKWASH				
	TANK SIZE	TANK SIZE FT ³	MICRO Z™ FT ³	SERVICE GPM	10 GPM FT ²	15 GPM FT ²	20 GPM FT ²	BACKWASH GPM
PWM10111A10	9" x 48"	.44	1.0	4.4	6.6	8.8	7.0 GPM	
PWM10111B10	10" x 54"	.54	1.5	5.4	8.1	10.8	7.0 GPM	
PWM10111C10	12" x 52"	.78	2.0	7.8	11.7	15.6	10 GPM	
PWM15121D10	14" x 65"	1.07	3.0	10.7	16.0	21.4	20 GPM	
PWM15121E10	16" x 65"	1.39	4.0	13.9	20.8	27.8	20 GPM	
PWM15121G10	21" x 62"	2.41	7.0	24.1	36.1	48.2	40 GPM	
PWM20141H10	24" x 72"	3.14	10	31.4	47.1	62.8	50 GPM	
PWM20141I10	30" x 72"	4.91	15	49.1	73.6	98.2	85 GPM	
PWM30151J10	36" x 72"	7.07	20	70.7	106.1	141.4	100 GPM	

For additional information, access online literature ES-WQ-PWM

Series PWS10

Commercial Water Softening Systems

Connection Size: 1" (25 mm)

Flow Rates: Up to 25 gpm (94 lpm)

Watts Pure Water Series PWS10 Water Softening Systems are highly efficient conventional cation exchange type water softeners. They are suitable for commercial applications ranging from 30,000 to 120,000 grains of hardness removal and flow rates up to 25 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS10 water softeners are designed for point of use or point of entry applications where the benefits of softened water are required. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications. Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS10 Water Softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.



PWS10

Features

- WQA Certified fully automatic metered demand control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

- Control Valve- WQA Certified to NSF/ANSI Std. 61
- Ion Exchange Resin- WQA Certified to NSF/ANSI Std. 44
- Mineral Tank- NSF Certified to ANSI Std. 44 or 61

Ordering Information

MODEL NO.	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT
PWS10111A11	1 Cubic Foot Simplex Softener with Flow Meter	1"	18" x 32" x 59"	116 lbs.
PWS10111B11	1.5 Cubic Foot Simplex Softener with Flow Meter	1"	18" x 33" x 65"	136 lbs.
PWS10111C11	2 Cubic Foot Simplex Softener with Flow Meter	1"	18" x 35" x 63"	196 lbs.
PWS10111D11	3 Cubic Foot Simplex Softener with Flow Meter	1"	18" x 40" x 76"	240 lbs.
PWS10111E11	4 Cubic Foot Simplex Softener with Flow Meter	1"	18" x 40" x 76"	320 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT3	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS10111A11	9" x 48"	1.0	10 lbs.	18" x 40"	400	30 K	20 K	15	6	9/15	15/25	2.0
PWS10111B11	10" x 54"	1.5	10 lbs.	18" x 40"	400	45 K	30 K	22.5	9	10/15	15/25	2.4
PWS10111C11	12" x 52"	2.0	30 lbs.	18" x 40"	400	60 K	40 K	30	12	15/20	15/25	3.5
PWS10111D11	14" x 65"	3.0	60 lbs.	18" x 40"	400	90 K	60 K	45	18	18/23	15/25	5.0
PWS10111E11	16" x 65"	4.0	80 lbs.	18" x 40"	400	120 K	80 K	60	24	19/25	15/25	7.0

For additional information, access online literature ES-WQ-PWS10

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWS15

Commercial Water Softening Systems

Connection Size: 1½" (40 mm)

Flow Rates: Up to 55 gpm (208 lpm)

Watts Pure Water Series PWS15 Water Softening Systems are highly efficient conventional cation exchange type water softeners. They are suitable for commercial applications ranging from 60,000 to 300,000 grains of hardness removal and flow rates up to 55 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS15 water softeners are designed for point of use or point of entry applications where the benefits of softened water are required. These systems exchange scale-forming calcium and magnesium ions with non scale-forming sodium ions to create soft water for a variety of applications. Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS15 water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build-up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.



PWS15

Features

- WQA Certified fully automatic metered demand control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

- Control Valve- WQA Certified to NSF/ANSI Std. 61
Ion Exchange Resin- WQA Certified to NSF/ANSI Std. 44
Mineral Tank- NSF Certified to ANSI Std. 44 or 61

Ordering Information

MODEL NO.	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT
PWS15121C11	2 Cubic Foot Simplex Softener with Flow Meter	1½"	24" x 42" x 75"	210 lbs.
PWS15121D11	3 Cubic Foot Simplex Softener with Flow Meter	1½"	24" x 44" x 87"	240 lbs.
PWS15121E11	4 Cubic Foot Simplex Softener with Flow Meter	1½"	24" x 46" x 87"	320 lbs.
PWS15121F11	5 Cubic Foot Simplex Softener with Flow Meter	1½"	24" x 50" x 87"	380 lbs.
PWS15121G11	7 Cubic Foot Simplex Softener with Flow Meter	1½"	24" x 52" x 84"	585 lbs.
PWS15121H11	10 Cubic Foot Simplex Softener with Flow Meter	1½"	39" x 69" x 96"	710 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY			LBS. SALT PER REGENERATION			FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT ³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM		
PWS15121C11	12" x 52"	2.0	30 lbs.	18" x 40"	400	60 K	40 K	30	12	15/20	15/25	4.0		
PWS15121D11	14" x 65"	3.0	60 lbs.	18" x 40"	400	90 K	60 K	45	18	17/22	15/25	5.0		
PWS15121E11	16" x 65"	4.0	80 lbs.	18" x 40"	400	120 K	80 K	60	24	25/40	15/25	7.0		
PWS15121F11	18" x 65"	5.0	100 lbs.	24" x 41"	600	150 K	100 K	75	30	30/50	15/25	11.0		
PWS15121G11	21" x 62"	7.0	100 lbs.	24" x 50"	800	210 K	140 K	105	42	35/53	15/25	13.0		
PWS15121H11	24" x 72"	10.0	200 lbs.	30" x 50"	1400	300 K	200 K	150	60	40/55	15/25	15.0		

For additional information, access online literature ES-WQ-PWS15

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWS20 and PWS20-2

Commercial Water Softening Systems

Connection Size: 2" (50mm)

Flow Rates: Up to 105 gpm (397 lpm)

Watts Pure Water Series PWS20 Water Softening Systems are highly efficient conventional cation exchange type water softeners. They are suitable for commercial applications ranging from 90,000 to 600,000 grains of hardness removal per tank and flow rates up to 105 gallons per minute. Where continuous softened water is required PWS20-2 duplex alternating systems can be specified for uninterrupted service. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS20 water softeners are designed for point of use or point of entry applications where the benefits of softened water are required. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications.

Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, cooling tower make up water, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS20 water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.

Features

- WQA Certified fully automatic metered demand control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

- Control Valve- WQA Certified to NSF/ANSI Std. 61
- Ion Exchange Resin- WQA Certified to NSF/ANSI Std. 44
- Mineral Tank- NSF Certified to ANSI Std. 44 or 61



PWS20



PWS20-2



Water Softeners

Ordering Information

MODEL NO.	DESCRIPTION	SPACE REQUIRED			WEIGHT
		W	X	D X H	
PWS20131D11	3 Cubic Foot 2" Simplex Softener with Flow Meter		18"	x 37" x 87"	265 lbs.
PWS20131E11	4 Cubic Foot 2" Simplex Softener with Flow Meter		18"	x 39" x 87"	350 lbs.
PWS20131F11	5 Cubic Foot 2" Simplex Softener with Flow Meter		24"	x 48" x 89"	400 lbs.
PWS20131G11	7 Cubic Foot 2" Simplex Softener with Flow Meter		24"	x 52" x 89"	600 lbs.
PWS20131H11	10 Cubic Foot 2" Simplex Softener with Flow Meter		30"	x 60" x 96"	710 lbs.
PWS20131I11	15 Cubic Foot 2" Simplex Softener with Flow Meter		39"	x 75" x 106"	1160 lbs.
PWS20131J11	20 Cubic Foot 2" Simplex Softener with Flow Meter		39"	x 81" x 107"	1560 lbs.
PWS20131D21	3 Cubic Foot 2" Duplex Alternating Softener with Flow Meter		18"	x 60" x 87"	450 lbs.
PWS20131E21	4 Cubic Foot 2" Duplex Alternating Softener with Flow Meter		18"	x 64" x 87"	500 lbs.
PWS20131F21	5 Cubic Foot 2" Duplex Alternating Softener with Flow Meter		24"	x 72" x 89"	800 lbs.
PWS20131G21	7 Cubic Foot 2" Duplex Alternating Softener with Flow Meter		24"	x 80" x 89"	1200 lbs.
PWS20131H21	10 Cubic Foot 2" Duplex Alternating Softener with Flow Meter		30"	x 90" x 96"	1400 lbs.
PWS20131I21	15 Cubic Foot 2" Duplex Alternating Softener with Flow Meter		39"	x 111" x 106"	2200 lbs.
PWS20131J21	20 Cubic Foot 2" Duplex Alternating Softener with Flow Meter		39"	x 123" x 107"	3000 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT ³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS20131D11	14" x 65"	3	60 lbs.	18" x 40"	400	90 K	60 K	45	18	25/40	15/25	5
PWS20131E11	16" x 65"	4	80 lbs.	18" x 40"	400	120 K	80 K	60	24	35/55	15/25	7
PWS20131F11	18" x 65"	5	100 lbs.	24" x 41"	600	150 K	100 K	75	30	57/65	15/25	10
PWS20131G11	21" x 62"	7	100 lbs.	24" x 50"	600	210 K	140 K	105	42	60/77	15/25	12
PWS20131H11	24" x 72"	10	200 lbs.	30" x 50"	1200	300 K	200 K	150	60	74/97	15/25	15
PWS20131I11	30" x 72"	15	400 lbs.	39" x 48"	2200	450 K	300 K	225	90	80/100	15/25	25
PWS20131J11	36" x 72"	20	500 lbs.	39" x 48"	2200	600 K	400 K	300	120	84/105	15/25	35

For additional information, access online literature ES-WQ-PWS20_S20-2

Series PWS30 and PWS30-2

Commercial Water Softening Systems

Connection Size: 3" (80 mm)

Flow Rates: Up to 280 gpm (1059 lpm)

Watts Pure Water Series PWS30 Water Softening Systems are highly efficient conventional cation exchange type water softeners. They are suitable for commercial applications ranging from 300,000 to 1,050,000 grains of hardness removal per tank and flow rates up to 280 gallons per minute. Where continuous softened water is required PWS30-2 duplex alternating systems can be specified for uninterrupted service. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS30 water softeners are designed for point of use or point of entry applications where the benefits of softened water are required. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications. Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, cooling tower make up water, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS30 water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.



PWS30



PWS30-2

Features

- WQA Certified fully automatic metered demand control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

- Control Valve- WQA Certified to NSF/ANSI Std. 61
- Ion Exchange Resin- WQA Certified to NSF/ANSI Std. 44
- Mineral Tank- NSF Certified to ANSI Std. 44 or 61



Water Softeners

Ordering Information

MODEL NO.	DESCRIPTION	SPACE REQUIRED		WEIGHT
		W	X D X H	
PWS30151H11	10 Cubic Foot 3" Simplex Softener with Flow Meter	39"	x 69" x 103"	1070 lbs.
PWS30151I11	15 Cubic Foot 3" Simplex Softener with Flow Meter	39"	x 75" x 107"	1600 lbs.
PWS30151J11	20 Cubic Foot 3" Simplex Softener with Flow Meter	39"	x 81" x 109"	2015 lbs.
PWS30151K11	30 Cubic Foot 3" Simplex Softener with Flow Meter	42"	x 90" x 117"	3245 lbs.
PWS30151L11	35 Cubic Foot 3" Simplex Softener with Flow Meter	50"	x 104" x 117"	4295 lbs.
PWS30151H21	10 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	39"	x 100" x 103"	2070 lbs.
PWS30151I21	15 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	39"	x 117" x 107"	3000 lbs.
PWS30151J21	20 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	39"	x 129" x 109"	4015 lbs.
PWS30151K21	30 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	42"	x 144" x 117"	6245 lbs.
PWS30151L21	35 Cubic Foot 3" Duplex Alternating Softener with Flow Meter	50"	x 164" x 117"	8295 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT ³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS30151H11	24" x 72"	10	200 lbs.	30" x 50"	1400	300 K	200 K	150	60	120/170	15/25	15
PWS30151I11	30" x 72"	15	400 lbs.	39" x 48"	2200	450 K	300 K	225	90	158/212	15/25	25
PWS30151J11	36" x 72"	20	500 lbs.	39" x 60"	2700	600 K	400 K	300	120	185/250	15/25	35
PWS30151K11	42" x 72"	30	700 lbs.	42" x 60"	3100	900 K	600 K	450	180	200/268	15/25	45
PWS30151L11	48" x 72"	35	900 lbs.	50" x 60"	4500	1050K	700 K	525	210	213/280	15/25	60

For additional information, access online literature ES-WQ-PWS30_S30-2

Series PWS10T

Commercial Water Softening Systems

Connection Size: 1" (25mm)

Flow Rates: Up to 25 gpm (94 lpm)

Watts Pure Water Series PWS10T Water Softening Systems are highly efficient, twin alternating, conventional cation exchange type water softeners. They are designed to supply continuous softened water without interruption.

Series PWS10T water softeners are suitable for commercial applications ranging from 30,000 to 120,000 grains of hardness removal per tank and flow rates up to 25 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS10T water softeners are designed for point-of-use or point-of-entry applications where the benefits of softened water are required and water demand is round the clock. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications. Steam boiler make up water, water heater pre-treatment, reverse osmosis pretreatment, cooling tower make up water, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS10T water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.

Features

- Twin alternating design for continuous softened water
- WQA Certified fully automatic metered demand control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system



Standards

Control Valve- WQA Certified to NSF/ANSI Std. 61

Ion Exchange Resin- WQA Certified to NSF/ANSI Std. 44

Mineral Tank- NSF Certified to ANSI Std. 44 or 61

Ordering Information

MODEL NO.	DESCRIPTION	PIPE SIZE	SPACE REQUIRED D X W X H	WEIGHT
PWS10T161A21	1 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 42" x 70"	230 lbs.
PWS10T161B21	1.5 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 44" x 76"	290 lbs.
PWS10T161C21	2 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 48" x 74"	350 lbs.
PWS10T161D21	3 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 58" x 87"	500 lbs.
PWS10T161E21	4 Cubic Foot Twin Alt. Water Softener with Flow Meter	1"	18" x 62" x 87"	650 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	Tank Size	Resin Ft ³	Gravel #20	Tank Size	Salt Fill	Max	Min	Max	Min	Serv GPM	Drop PSI	BKW GPM
PWS10T161A21	9" x 48"	1.0	10 lbs.	18" x 40"	400	30 K	20 K	15	6	9/15	15/25	2.0
PWS10T161B21	10" x 54"	1.5	10 lbs.	18" x 40"	400	45 K	30 K	22.5	9	10/15	15/25	2.4
PWS10T161C21	12" x 52"	2.0	30 lbs.	18" x 40"	400	60 K	40 K	30	12	15/20	15/25	3.5
PWS10T161D21	14" x 65"	3.0	60 lbs.	18" x 40"	400	90 K	60 K	45	18	18/23	15/25	5.0
PWS10T161E21	16" x 65"	4.0	80 lbs.	18" x 40"	400	120 K	80 K	60	24	19/25	15/25	7.0

For additional information, access online literature ES-WQ-PWS10T

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWS15T

Commercial Water Softening Systems

Connection Size: 1½" (40 mm)

Flow Rates: Up to 55 gpm (208 lpm)

Watts Pure Water Series PWS15T Water Softening Systems are highly efficient, twin alternating, conventional cation exchange type water softeners. They are designed to supply continuous softened water without interruption.

Series PWS15T water softeners are suitable for commercial applications ranging from 60,000 to 300,000 grains of hardness removal per tank and flow rates up to 55 gallons per minute. Regeneration is meter demand initiated. All cycles of regeneration are fully automatic and do not require manual actuation.

Watts Pure Water Series PWS15T water softeners are designed for point of use or point of entry applications where the benefits of softened water are required and water demand is round the clock. These systems exchange scale-forming calcium and magnesium ions with non-scale forming sodium ions to create soft water for a variety of applications.

Steam boiler make up water, water heater pretreatment, reverse osmosis pretreatment, cooling tower make up water, sterilizer make up water, washing, and process water are all common applications for the Watts Pure Water Series PWS15T water softeners.

Softened water provides a wide variety of benefits from not introducing scale into pipes, valves, water heating equipment, heat exchangers, and cooling towers to reducing mineral build up in areas that see excessive splashing such as food preparation counters and sink areas. Softened water also conserves soaps and cleaning agents by eliminating the formation of soap curd, so your cleaners can work on cleaning - not reacting with the hardness in your water.

Features

- Twin alternating design for continuous softened water
- WQA Certified fully automatic metered demand control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable regeneration cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- WQA Certified high capacity resin
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system



PWS15T

Standards

Control Valve- WQA Certified to NSF/ANSI Std. 61

Ion Exchange Resin- WQA Certified to NSF/ANSI Std. 44

Mineral Tank- NSF Certified to ANSI Std. 44 or 61

Ordering Information

MODEL NO.	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W X D X H	WEIGHT
PWS15T171C21	2 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 42" x 75"	370 lbs.
PWS15T171D21	3 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 44" x 87"	550 lbs.
PWS15T171E21	4 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 46" x 87"	720 lbs.
PWS15T171F21	5 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 50" x 89"	900 lbs.
PWS15T171G21	7 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	24" x 52" x 89"	1215 lbs.
PWS15T171H21	10 Cubic Foot Twin Alt. Water Softener with Flow Meter	1½"	39" x 69" x 96"	1750 lbs.

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN FT ³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BKW GPM
PWS15T171C21	12" x 52"	2.0	30 lbs.	24" x 41"	600	60 K	40 K	30	12	15/20	15/25	5.0
PWS15T171D21	14" x 65"	3.0	60 lbs.	24" x 41"	600	90 K	60 K	45	18	17/22	15/25	7.0
PWS15T171E21	16" x 65"	4.0	80 lbs.	24" x 41"	600	120 K	80 K	60	24	25/40	15/25	9.0
PWS15T171F21	18" x 65"	5.0	100 lbs.	24" x 41"	600	150 K	100 K	75	30	30/50	15/25	12.0
PWS15T171G21	21" x 62"	7.0	100 lbs.	24" x 50"	800	210 K	140 K	105	42	35/53	15/25	15.0
PWS15T171H21	24" x 72"	10.0	200 lbs.	30" x 50"	1200	300 K	200 K	150	60	40/55	15/25	15.0

For additional information, access online literature ES-WQ-PWS15T

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWR2511

Commercial Reverse Osmosis Systems

Flow Rates: Up to 1,200 gallons per day (4,542 lpd)

Watts Pure Water Series PWR2511 Reverse Osmosis (RO) Systems are commercial grade high-pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 150 to 1,200 gallons per day. The standard units are designed for wall mounting. Where floor mounting is preferred the optional floor mounting kit Model No. PWR2864 can be specified. Reverse osmosis is a process where high-pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high-rejection membranes to achieve a minimum average NaCl ionic rejection of 95 percent.

Series PWR2511 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features for monitoring and operation. Stainless steel membrane housings, inlet and outlet pre-filter pressure gauges, low pressure switch with delayed auto restart, permeate pressure switch, adjustable reject recycle, permeate and reject water flow meters, permeate water check valve, inlet solenoid valve, membrane feed water pressure gauge, adjustable reject valve, and membrane auto flush are all standard features. The standard systems are designed to feed an atmospheric storage tank or a pressurized bladder tank. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

Features

- 304 stainless steel wall mounted support frame
- 316L stainless steel 300psi high-pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet and membrane feed pressure
- Low feed water pressure safety switch
- Microprocessor based controller with delayed auto restart after low pressure shut down
- High-pressure/high-rejection membranes with 95% minimum average salt rejection
- Permeate and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate pressure switch and check valve
- Automatic inlet solenoid valve
- Membrane Auto Flush

Standards

- Pre-filter Housing NSF/ANSI Certified 42
- Pre-filter Cartridge NSF/ANSI Certified 42

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.



PWR2511



Reverse Osmosis

Ordering Information

MODEL NO.	DESCRIPTION
PWR25111011	150 Gallon Per Day Reverse Osmosis System With Auto Flush
PWR25112011	250 Gallon Per Day Reverse Osmosis System With Auto Flush
PWR25113011	600 Gallon Per Day Reverse Osmosis System With Auto Flush
PWR25113021	1200 Gallon Per Day Reverse Osmosis System With Auto Flush
PWR2864	Optional Stainless Steel Leg Kit For All Models

Performance

Maximum Productivity (gallons per day)	150	250	600	1200
Quality (average membrane rejection)	98 %	98 %	98 %	98 %
Recovery (user adjustable)	15 - 75 %	15 - 75 %	15 - 75 %	25 - 75 %
Membrane Size	2½" x 14"	2½" x 21"	2½" x 40"	2½" x 40"
Number Of Membranes	1	1	1	2
Prefilter (system ships with one 5-micron cartridge)		10"		
Feed Water Connection		½" NPT		
Product Water Connection (tubing OD)		¾"		
Reject Water Connection (tubing OD)		¾"		
Feed Water Required (maximum)		2.4 gpm		
Feed Water Pressure (minimum)		20 psi		
Drain Required (maximum)		2.4 gpm		
Electrical Requirement		120 VAC 60 Hz 8 amps		
Motor Horse Power		½		
Dimensions W x H x D (approximate)	22" x 32" x 12"		22" x 52" x 12"	
Shipping Weight (estimated pounds)	50	50	60	70

For additional information, access online literature ES-WQ-PWR2511

Series PWR4011

Commercial Reverse Osmosis Systems

Flow Rates: Up to 5,400 gallons per day (20,439 lpd)

Watts Pure Water Series PWR4011 Reverse Osmosis (RO) Systems are commercial grade low-energy RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 1,800 to 5,400 gallons per day. These units are designed for wall mount installations. Reverse osmosis is a process where high-pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to a drain. These RO systems use low-energy membranes to achieve a minimum average NaCl ionic rejection of 95 percent.

The Series PWR4011 RO systems are a well designed rugged line of purifiers with high-pressure piping constructed of stainless steel. This series comes with a pre-selected assortment of features for monitoring and operation. Stainless steel membrane housings and high-pressure piping, inlet and outlet pre-filter pressure gauges, low-pressure switch with delayed auto restart, inputs for tank level and pretreatment interlock, adjustable reject recycle, permeate and reject water flow meters, permeate water check valve, inlet solenoid valve, membrane feed water pressure gauge, and adjustable reject valve are all standard features. These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

Features

- Stainless steel high-pressure piping
- 304 stainless steel wall mounted support frame
- 316L stainless steel 300psi high-pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet and membrane feed pressure
- Low feed water pressure safety switch
- Microprocessor based controller with delayed auto restart after low-pressure shut down
- Tank level and pretreatment interlock inputs
- Low-energy membranes with 95% minimum average salt rejection
- Permeate and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet solenoid valve
- 10" full-flow pre-filter

Standards

- Pre-filter Housing NSF/ANSI Certified 42

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.



PWR4011

Ordering Information

MODEL NO.	DESCRIPTION
PWR40113012	1800 gallon per day RO with stainless steel valves and fittings
PWR40113022	3600 gallon per day RO with stainless steel valves and fittings
PWR40113032	5400 gallon per day RO with stainless steel valves and fittings

Performance

Maximum Productivity (gallons per day)	1800	3600	5400
Quality (typical membrane percent rejection)	98 %	98 %	98 %
Recovery (adjustable)	15 - 75 %	25 - 75 %	35 - 75 %
Membrane Size	4" x 40"		
Number Of Membranes	1	2	3
Prefilter (system ships with one 5-micron cartridge)	10" BB		
Feed Water Connection	1" NPT		
Product Water Connection (tubing OD)	1/2"	1/2"	5/8"
Reject Water Connection (tubing OD)	1/2"		
Feed Water Required (at 50% recovery)	2.5 gpm	5 gpm	7.5 gpm
Feed Water Pressure (minimum)	20 psi		
Drain Required (maximum)	10 gpm		
Electrical Requirement (other voltages available)	230 VAC 60 Hz 6 amps	230 VAC 60 Hz 6 amps	230 VAC 60 Hz 9 amps
Motor Horse Power	1	1	1.5
Dimensions L x H x D (approximate)	41" x 51" x 18"		

For additional information, access online literature ES-WQ-PWR4011

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWR4021

Commercial Reverse Osmosis Systems

Flow Rates: Up to 10,800 gallons per day (40,878 lpd)

Watts Pure Water Series PWR4021 Reverse Osmosis (RO) Systems are commercial grade high-pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 3,600 to 10,800 gallons per day. These units are designed for floor mount installations. Reverse osmosis is a process where high-pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high-pressure/high-rejection membranes to achieve a minimum average NaCl ionic rejection of 95 percent.

The Series PWR4021 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features, including our digital controller, for monitoring and operation. Stainless steel membrane housings, inlet and outlet pre-filter pressure gauges, low-pressure switch with delayed auto restart, inputs for tank level and pretreatment interlock, conductivity meter, high conductivity alarm output, adjustable reject recycle, permeate and reject water flow meters, reject recycle flow meter, permeate water check valve, inlet solenoid valve, membrane feed and reject water pressure gauges, auto flush, and adjustable reject valve are all standard features. These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

Ordering Information

MODEL NO.	DESCRIPTION
PWR40213023	3600 GPD Reverse Osmosis System with Micro Processor Control and Auto Flush
PWR40213033	5400 GPD Reverse Osmosis System with Micro Processor Control and Auto Flush
PWR40213043	7200 GPD Reverse Osmosis System with Micro Processor Control and Auto Flush
PWR40213053	9000 GPD Reverse Osmosis System with Micro Processor Control and Auto Flush
PWR40213063	10,800 GPD Reverse Osmosis System with Micro Processor Control and Auto Flush

Performance

Maximum Productivity (gallons per day)	3600	5400	7200	9000	10,800
Quality (typical membrane percent rejection)			98 %		
% Recovery (adjustable)	25 - 75	36 - 75	42 - 75	46 - 75	50 - 75
Membrane Size			4" x 40"		
Number Of Membranes	2	3	4	5	6
Prefilter (systems ship with one 5-micron cartridge)			20" BB		
Feed Water Connection			1" FNPT		
Product Water Connection			¾" FNPT		
Reject Water Connection			¾" FNPT		
Feed Water Required (GPM at 50% recovery)	5	7.5	10	12.5	15
Feed Water Pressure (minimum)			20 psi		
Drain Required (maximum)			15 gpm		
Electrical Requirement (other voltages available)			230 VAC, 3-phase, 60 Hz, 15 amps		
Motor Horse Power			5		
Dimensions L x W x H (approximate)			60" x 18" x 56"		
Shipping Weight (estimated pounds)	400	500	600	700	800



PWR4021

Features

- Membrane Auto Flush
- Powder coated carbon steel support frame
- 316L stainless steel 300psi high-pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet, membrane feed, and reject water pressure
- Low feed water pressure safety switch
- Digital microprocessor based controller with delayed auto restart after low-pressure shut down
- Permeate water conductivity meter with high-conductivity alarm output
- Tank level and pretreatment interlock inputs
- High-pressure/high-rejection membranes with 95% minimum average salt rejection
- Permeate, reject recycle, and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet solenoid valve
- 20" full-flow pre-filter

Standards

Pre-filter Housing NSF/ANSI Certified 42

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

For additional information, access online literature ES-WQ-PWR4021

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWR4022

Commercial Reverse Osmosis Systems

Flow Rate: Up to 15 gpm (56 lpm)

Watts Pure Water Series PWR4022 Reverse Osmosis (RO) Systems are commercial grade high pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 10 to 15 gallons per minute. These units are designed for floor mount installations. Reverse osmosis is a process where high pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high pressure/high rejection membranes to achieve a minimum average NaCl ionic rejection of 97 percent.

The Series PWR4022 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features, including our digital controller, for monitoring and operation. Corrosion resistant fiberglass reinforced plastic (FRP) membrane housings, inlet and outlet pre-filter pressure gauges, low pressure switch with delayed auto restart, inputs for tank level and pretreatment interlock, conductivity meter, high conductivity alarm output, adjustable reject recycle, permeate and reject water flow meters, reject recycle flow meter, permeate water check valve, inlet solenoid valve, membrane feed and reject water pressure gauges, auto flush, and adjustable reject valve are all standard features. These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

Ordering Information

MODEL NO.	DESCRIPTION
PWR40223083	10 GPM Reverse Osmosis System with Micro Processor Control and Auto Flush
PWR40223103	12.5 GPM Reverse Osmosis System with Micro Processor Control and Auto Flush
PWR40223123	15 GPM Reverse Osmosis System with Micro Processor Control and Auto Flush

Performance

Maximum Productivity (gallons per minute)	10	12.5	15
Quality (typical membrane percent rejection)		98 %	
Recovery (adjustable)		60 - 75 %	
Membrane Size		4" x 40"	
Membrane Array (two elements per vessel)	2:1:1	2:2:1	3:2:1
Prefilter (system ships with one 5-micron cartridge)		20" Big Blue	
Feed Water Connection		1" FNPT	
Product Water Connection		1" FNPT	
Reject Water Connection		¾" FNPT	
Feed Water Required (GPM at 65% recovery)	17	21	25
Minimum Feed Water Pressure		20 psig	
Drain Required (maximum)	17	21	25
Electrical Requirement (other voltages available)		230 VAC, 3-phase, 60 Hz, 20 amps	
Motor Horse Power / Type		7.5 / TEFC	
Dimensions L x W x H (approximate)		96" x 24" x 72"	
Shipping Weight (estimated pounds)	800	900	1000



PWR4022

Features

- Membrane Auto Flush
- Powder coated carbon steel support frame
- Corrosion resistant 300psi FRP high pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet, membrane feed, and reject water pressure
- Low feed water pressure safety switch
- Digital microprocessor based controller with delayed auto restart after low pressure shut down
- Permeate water conductivity meter with high conductivity alarm output
- Tank level and pretreatment interlock inputs
- High pressure/high rejection membranes with 97% minimum average salt rejection
- Permeate, reject recycle, and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet solenoid valve
- 20" full-flow pre-filter

Standards

Pre-filter Housing- NSF/ANSI Certified Std. 42

Membrane Housings- NSF/ANSI Certified Std. 61

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

For additional information, access online literature ES-WQ-PWR4022

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWR4024

Commercial Reverse Osmosis Systems

Flow Rates: Up to 30 gpm (113 lpm)

Watts Pure Water Series PWR4024 Reverse Osmosis (RO) Systems are commercial grade high pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 20 to 30 gallons per minute. These units are designed for floor mount installations. Reverse osmosis is a process where high pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high pressure/high rejection membranes to achieve a minimum average NaCl ionic rejection of 97 percent.

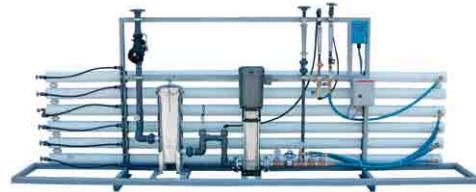
The Series PWR4024 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features, including our digital controller, for monitoring and operation. Corrosion resistant fiberglass reinforced plastic (FRP) membrane housings, inlet and outlet pre-filter pressure gauges, low pressure switch with delayed auto restart, inputs for tank level and pretreatment interlock, conductivity meter, high conductivity alarm output, adjustable reject recycle, permeate and reject water flow meters, reject recycle flow meter, permeate water check valve, inlet diaphragm valve, membrane feed and reject water pressure gauges, auto flush, and adjustable reject valve, are all standard features. These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

Ordering Information

MODEL NO.	DESCRIPTION
PWR40243163	20 GPM Reverse Osmosis System with Micro Processor Controller and Auto Flush
PWR40243203	25 GPM Reverse Osmosis System with Micro Processor Controller and Auto Flush
PWR40243243	30 GPM Reverse Osmosis System with Micro Processor Controller and Auto Flush

Performance

Maximum Productivity (gallons per minute)	20	25	30
Quality (typical membrane percent rejection)	98%		
Recovery (adjustable)	65% – 75%		
Membrane Size	4" x 40"		
Membrane Array (four elements per vessel)	2:2	3:2	4:2
Prefilter (system ships with 5-micron cartridges)	7 round x 20"		
Feed Water Connection	2" Flange		
Product Water Connection	1½" Flange		
Reject Water Connection	1" Flange		
Feed Water Required (GPM at 65% recovery)	31	39	46
Minimum Feed Water Pressure	20 psig		
Drain Required (maximum)	31	39	46
Electrical Requirement (other voltages available)	230 VAC, 3-phase, 60 Hz, 30 amps		
Motor Horse Power / Type	10 / TEFC		
Dimensions L x W x H (approximate)	192" x 26" x 72"		
Shipping Weight (estimated pounds)	1400	1600	1800



PWR4024

Features

- Powder coated carbon steel support frame
- Corrosion resistant 300psi FRP high pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet, membrane feed, and reject water pressure
- Low feed water pressure safety switch
- Digital microprocessor based controller with delayed auto restart after low pressure shut down
- Permeate water conductivity meter with high conductivity alarm output
- Tank level and pretreatment interlock inputs
- High pressure/high rejection membranes with 97% minimum average salt rejection
- Permeate, reject recycle, and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet diaphragm valve
- 90 gallon per minute full-flow 316 stainless steel pre-filter

Standards

Pre-filter Housing- NSF/ANSI Certified Std. 42

Membrane Housings- NSF/ANSI Certified Std. 61

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.

For additional information, access online literature ES-WQ-PWR4024

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWR8024

Commercial Reverse Osmosis Systems

Flow Rates: Up to 100 gpm (378 lpm)

Watts Pure Water Series PWR8024 Reverse Osmosis (RO) Systems are commercial grade high pressure RO units for the reduction of total dissolved solids from water. They are designed to supply reverse osmosis quality water with production rates ranging from 40 to 100 gallons per minute. These units are designed for floor mount installations. Reverse osmosis is a process where high pressure feed water is fed into a semi-permeable membrane. In the membrane, pure water is allowed to pass through the membrane material and exit as purified permeate water. Dissolved mineral salts are not allowed to pass through the membrane and become a concentrated reject stream that is sent to drain. These RO systems use high-pressure/high-rejection membranes to achieve a minimum average NaCl ionic rejection of 99 percent.

The Series PWR8024 RO systems are a well designed rugged line of purifiers. This series comes with a pre-selected assortment of features, including our digital controller, for monitoring and operation. Corrosion resistant fiberglass reinforced plastic (FRP) membrane housings, inlet and outlet pre-filter pressure gauges, 316 stainless steel membrane feed water piping, low pressure switch with programmable delayed auto restart, inputs for tank level and pretreatment interlock, conductivity meter with percent ionic rejection displayed, high conductivity alarm output, adjustable reject recycle, permeate and reject water flow meters, reject recycle flow meter, permeate water check valve, inlet diaphragm valve, membrane feed and reject water pressure gauges, programmable auto flush, and adjustable reject valve are all standard features.

These systems are designed to feed an atmospheric storage tank for collection of the reverse osmosis water. Reverse osmosis water has a wide variety of applications including municipal water treatment, steam boiler and steam sterilizer make up, laboratory use, spot free rinsing, ice and beverage water, water for cooking, food processing, metal plating and finishing, as well as water for humidification. Reverse osmosis is also the pretreatment of choice for ion exchange type de-ionization (DI) systems. Using RO water as make up to a DI system reduces the exhaustion rate of the DI resin by up to 95 percent saving time, money, and chemicals associated with DI resin regeneration.

Features

- Membrane auto flush
- Powder coated carbon steel support frame
- Corrosion resistant 300psi FRP high pressure membrane housings
- Pressure gauges for pre-filter inlet/outlet, pump discharge, membrane feed, and reject water pressure
- Low feed water pressure safety switch
- Digital microprocessor based controller with delayed auto restart after low pressure shut down
- Permeate Water Conductivity meter with high conductivity alarm output and percent ionic rejection displayed
- Tank level and pretreatment interlock inputs
- High pressure/high rejection membranes with 99% minimum average salt rejection
- Permeate, reject recycle, and reject water flow meters
- Adjustable reject and reject recycle valves
- Permeate check valve
- Automatic inlet diaphragm valve



PWR8024

Standards

Membranes- Certified to NSF/ANSI Std. 61

Note: Feed Water must be pretreated for scale prevention (softened), de-chlorinated (carbon filter), and free of sediment.



Reverse Osmosis

Ordering Information

MODEL NO.	DESCRIPTION
PWR80243085	40 GPM Reverse Osmosis System with Micro Processor Controller and Auto Flush
PWR80243125	60 GPM Reverse Osmosis System with Micro Processor Controller and Auto Flush
PWR80243165	80 GPM Reverse Osmosis System with Micro Processor Controller and Auto Flush
PWR80243205	100 GPM Reverse Osmosis System with Micro Processor Controller and Auto Flush

Performance

Maximum Productivity (gallons per minute)	40	60	80	100
Quality (typical membrane percent rejection)		99%		
Recovery (adjustable)		65% - 75%		
Membrane Size		8" x 40"		
Membrane Array (four elements per vessel)	1:1	2:1	2:2	3:2
Prefilter (system ships with 5-micron cartridges)	7 round x 40"		7 round x 40"	
Feed Water Connection	2" Flange	2½" Flange	3" Flange	
Product Water Connection	2" Flange		2½" Flange	
Reject Water Connection		1½" Flange		
Feed Water Required (GPM at 65% recovery)	62	93	123	154
Minimum Feed Water Pressure	20 PSIG	20 PSIG	20 PSIG	20 PSIG
Drain Required (maximum)	62	93	123	154
460 VAC, 3-phase, 60Hz (other voltages available)	25 amps	30 amps	35 amps	40 amps
Motor Horse Power (TEFC Motor)	15	20	25	30
Dimensions L x W x H (approximate)		186" x 26" x 72"		
Shipping Weight (estimated pounds)	2500	2800	3200	3500

For additional information, access online literature ES-WQ-PWR8024

- Pressurized Steel Storage Tanks
- Pumps - Boosters and Demand/Delivery
- Standard Drinking Water Faucets (Air Gap and Non Air Gap)
- Designer Watts Top Mount Drinking Water Faucet
- Designer RO Drinking Water Faucets — Series 703 and 905
- Designer Watts Top Mount Drinking Water Faucet



PWFCT303

PWFCTTM

PWFC905



PWFCTDFFER

Permeate Pump

Storage Tank



Part and Accessories Part Number Matrix

	PW	FCT	TMM	BN
Pure Water				
System Type				
	RO = Reverse Osmosis			
	FCT = Faucet			
System Model				
	TNK = Storage Tank			
	303 = 303 Series Standard Faucet			
	TMM = Top Mount Series Monitor Faucet			
	TM = Top Mount Series Faucet			
	703 = 703 Series Faucet			
	905 = 905 Series Faucet			
	DFF = Dual Function Faucet			
System Capacity/Finish				
	3P = 3 Gallon, Plastic Tank			
	3 = 3 Gallon, Metal Tank			
	14 = 14 Gallon, Metal Tank			
	34 = 34 Gallon, Metal Tank			
	44 = 44 Gallon, Metal Tank			
	86 = 86 Gallon, Metal Tank			
	119 = 119 Gallon Metal Tank			
	CH = Chrome			
	BN = Brushed Nickel			
	BS = Brushed Steel			
	OB = Oil Rubbed Bronze			
	WH = White			
	AM = Almond			
	BK = Black			
	CHA = Chrome Air Gap			
	BNA = Brushed Nickel Air Gap			
	BSA = Brushed Steel Air Gap			
	OBA = Oil Rubbed Bronze Air Gap			
	WHA = White Air Gap			
	AMA = Almond Air Gap			
	BKA = Black Air Gap			
	ST = Straight Design			
	CR = Cross Design			
	ER = Euro Design			
	VS = Vase Design			

Pressurized Steel Storage Tanks

These tanks are used for storing reverse osmosis water and have been NSF tested and certified against ANSI/ NSF Standard 58 for material and structural integrity requirements. The inside of the tank has a polypropylene liner and utilizes a butyl diaphragm for the water storage area.



Pressurized RO Storage Tanks

MODEL NO.	VOLUME (GALLONS)	DESCRIPTION	DIAMETER (INCHES)	HEIGHT (INCHES)	COLOR	PIPE FITTINGS (INCHES)
PWROTNK3P	3	3 Gallon Plastic Tank	10"	21"	White	1/4"
PWROTNK3	3	3 Gallon - Metal Tank	11"	16"	White	1/4"
PWROTNK14	14	14 Gallon - Metal Tank	15"	23"	Blue	3/8"
PWROTNK34	34	34 Gallon - Metal Tank	16"	29"	Blue	1 1/4"
PWROTNK44	44	44 Gallon - Metal Tank	21"	36"	Blue	1 1/4"
PWROTNK86	86	86 Gallon - Metal Tank	26"	45"	Blue	1 1/4"
PWROTNK119	119	119 Gallon - Metal Tank	26"	60"	Blue	1 1/4"

Pumps - Booster

Permeate Pump

The Permeate Pump operates as a non-electrical energy recovery device which dramatically improves the efficiency of RO systems. Using only the available energy from the brine water (otherwise lost to the drain), the pump forces product water into the storage tank. This process effectively reduces membrane back pressure to less than 5psi and allows the membrane to maximize its use of the available feed pressure.



Booster Pump Kits

Designed as an accessory for Reverse Osmosis Units in areas with water pressure less than 40psi. These pump kits are quiet, easy to install, can significantly increase water output and work with all standard and manifold units.



Pumps - Booster and Demand/Delivery

MODEL NO.	DESCRIPTION	FLOW RATE (GPM)	PIPE (SUCTION)	PIPE (DISCHARGE)	VOLTS	HZ	PRESSURE (MAX)	AMPS (MAX)
PWPERMKIT	Permeate Pump Kit	-	1/4"	1/4"	-	-	-	-
PWBOOST05KT	Lo-Flow Booster Pump Kit	0.5	1/4"	1/4"	115	50/60	125	1
PWBOOST75KT	Hi-Flow Booster Pump Kit	0.75	3/8"	3/8"	115	50/60	125	2
PWDELPMP4.9	Booster Pump 5 GPM	5	1/2"	1/2"	115	50/60	125	2.2

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWFCT303

Standard RO Faucets

Watts Pure Water Standard Faucet comes in beautiful finishes to match today's designer kitchens. They are available in both Air Gap and Non Air Gap.

Faucet Type

Air Gap: The Air Gap faucet conforms to US plumbing codes and is designed for dispensing water from a Reverse Osmosis system or a Water Filtration system that requires a drain connection with an Air Gap.

Non Air Gap: This faucet is designed for dispensing water from a Reverse Osmosis system or a Water Filtration system that does not require a drain connection with an Air Gap.

Features

- Many faucet finishes to choose from
- Lever for dispensing
- Push and hold lever down to hold in the open position
- Lift lever up to keep in the open locked position
- Swivel Neck



PWFCT303



Standard Series Faucets - Air Gap

MODEL NO.	FINISH	CASE QTY.
PWFCT303CHA	Chrome	50
PWFCT303BNA	Brushed Nickel	50
PWFCT303BSA	Brushed Stainless Steel	50
PWFCT303OBA	Oil Rubbed Bronze	50
PWFCT303WHA	White	50
PWFCT303AMA	Almond	50
PWFCT303BKA	Black	50

Standard Series Faucets - Non Air Gap

MODEL NO.	FINISH	CASE QTY.
PWFCT303CH	Chrome	50
PWFCT303BN	Brushed Nickel	50
PWFCT303BS	Brushed Stainless Steel	50
PWFCT303OB	Oil Rubbed Bronze	50
PWFCT303WH	White	50
PWFCT303AM	Almond	50
PWFCT303BK	Black	50

For additional information, access online literature ES-WQ-PWFCT303

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWFCTTM

Top Mount Faucets

Size: $\frac{3}{8}$ " (10mm)

Features

- Top mount design – you'll never need to crawl below the sink again!
- Reduces installation labor
- Components touching water are stainless steel or non-metallic
- Wide range of finishes, including chrome, brushed nickel, oil rubbed bronze, white & black
- Models with filter change monitors are available to remind customers when to change cartridges for water quality assurance
- Ceramic disc for durability
- One style works for air gap and non air gap installations
- NSF certified for material requirements



Top mount faucets available in wide range of finishes.



Models with monitors are available

Top Mount Faucet Models

MODEL NO.	FINISH	INSTALLATION TYPE	TUBING SIZE	FILTER CHANGE MONITOR
PWFCTTMMCH	Chrome	Air gap or non air gap	$\frac{3}{8}$ "	Yes
PWFCTTMCH	Chrome	Air gap or non air gap	$\frac{3}{8}$ "	No
PWFCTTMMBN	Brushed Nickel	Air gap or non air gap	$\frac{3}{8}$ "	Yes
PWFCTTMBN	Brushed Nickel	Air gap or non air gap	$\frac{3}{8}$ "	No
PWFCTTMMW	White	Air gap or non air gap	$\frac{3}{8}$ "	Yes
PWFCTTMWH	White	Air gap or non air gap	$\frac{3}{8}$ "	No
PWFCTTMMBK	Black	Air gap or non air gap	$\frac{3}{8}$ "	Yes
PWFCTTMBK	Black	Air gap or non air gap	$\frac{3}{8}$ "	No
PWFCTTMMOB	Oil Rubbed Bronze	Air gap or non air gap	$\frac{3}{8}$ "	Yes
PWFCTTMOB	Oil Rubbed Bronze	Air gap or non air gap	$\frac{3}{8}$ "	No

For additional information, access online literature ES-WQ-PWFCTTM

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWFC703 & PWFC905

Designer RO Faucets

Watts Pure Water Designer RO Faucet comes in beautiful finishes to match today's designer kitchens. This designer faucet retrofits to most brands and makes an excellent upgrade from the basic faucets that come with most reverse osmosis or other filtration systems. The Series 703 is available in Chrome, Brushed Nickel, and Oil Rubbed Bronze finishes. While the Series 905 is available in Chrome and Brushed Nickel.

Features

- Smooth operating ceramic disk element
- Lever style handle
- High reach neck design
- Swivel neck
- Mounting hardware included
- Series 905 requires a $\frac{7}{8}$ " mounting hole and $\frac{1}{2}$ " for the Series 703



Series 703



Series 905

Series 703 Faucets

MODEL NO.	TYPE	FINISH	CASE QTY.
PWFCT703CH	Ceramic Disc – Non Air Gap	Chrome	30
PWFCT703BN	Ceramic Disc – Non Air Gap	Brushed Nickel	30
PWFCT703OB	Ceramic Disc – Non Air Gap	Oil Rubbed Bronze	30

Series 905 Faucets

MODEL NO.	TYPE	FINISH	CERTIFICATION	CASE QTY.
PWFCT905CH	Ceramic Disc – Non Air Gap	Chrome	NSF61 Certified	30
PWFCT905BN	Ceramic Disc – Non Air Gap	Brushed Nickel	NSF61 Certified	30

For additional information, access online literature ES-WQ-PWFCT703905

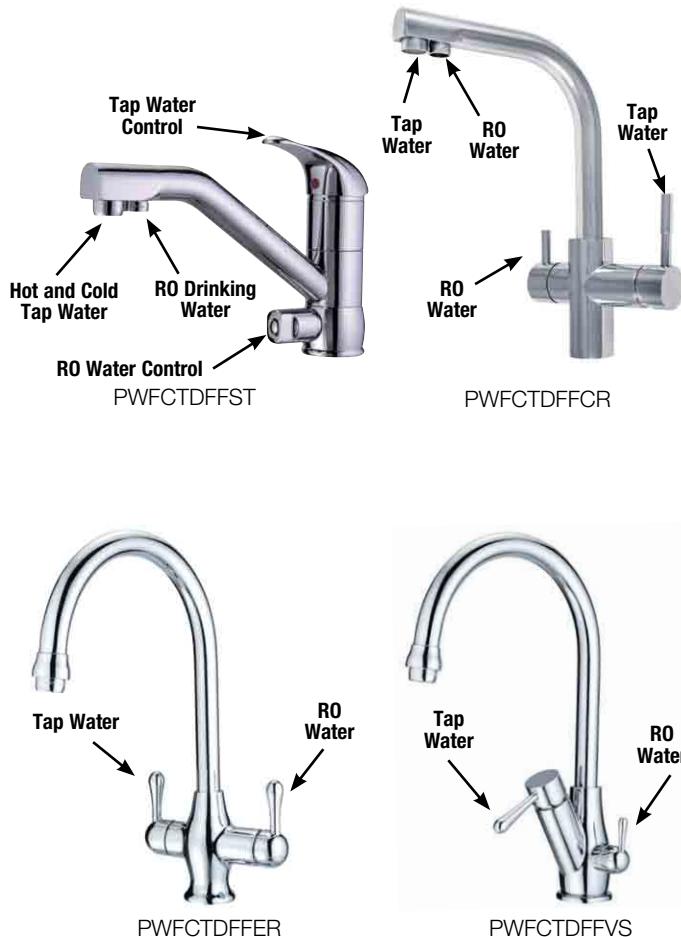
Series PWFCTDFF

Dual Function Faucets

Dual-Function Water Faucet for kitchen sinks. This contemporary 2-in-1 faucet works for both the hot and cold tap water and the filtered reverse osmosis water or any type of filtered water. Our faucets are available in Chrome finish in contemporary, classic, and European styles. The two-in-one faucets work for many popular Reverse Osmosis Systems including Watts.

Features

- 2-in-1 faucet works for both the hot/cold tap water and the filtered reverse osmosis water
- RO water is delivered via an independent tube
- Available in polished chrome finish in several popular styles and fits many popular RO systems
- Classic, contemporary, and European designs to go well in any kitchen
- NSF listed and certified to NSF/ANSI Standard 61 Section 9



Dual Function Faucets

MODEL NO.	STYLE	FINISH	CONNECTION	CASE QTY
PWFCTDFFST	Kitchen and Drinking Faucet, Straight	Chrome	3/8" Compression on Flexible Tube	8
PWFCTDFFCR	Kitchen and Drinking Faucet, Cross	Chrome	3/8" Compression on Flexible Tube	8
PWFCTDFFER	Kitchen and Drinking Faucet, European	Chrome	3/8" Compression on Flexible Tube	8
PWFCTDFFVS	Kitchen and Drinking Faucet, Vase	Chrome	3/8" Compression on Flexible Tube	8

For additional information, access online literature ES-WQ-PWFCTDFF

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

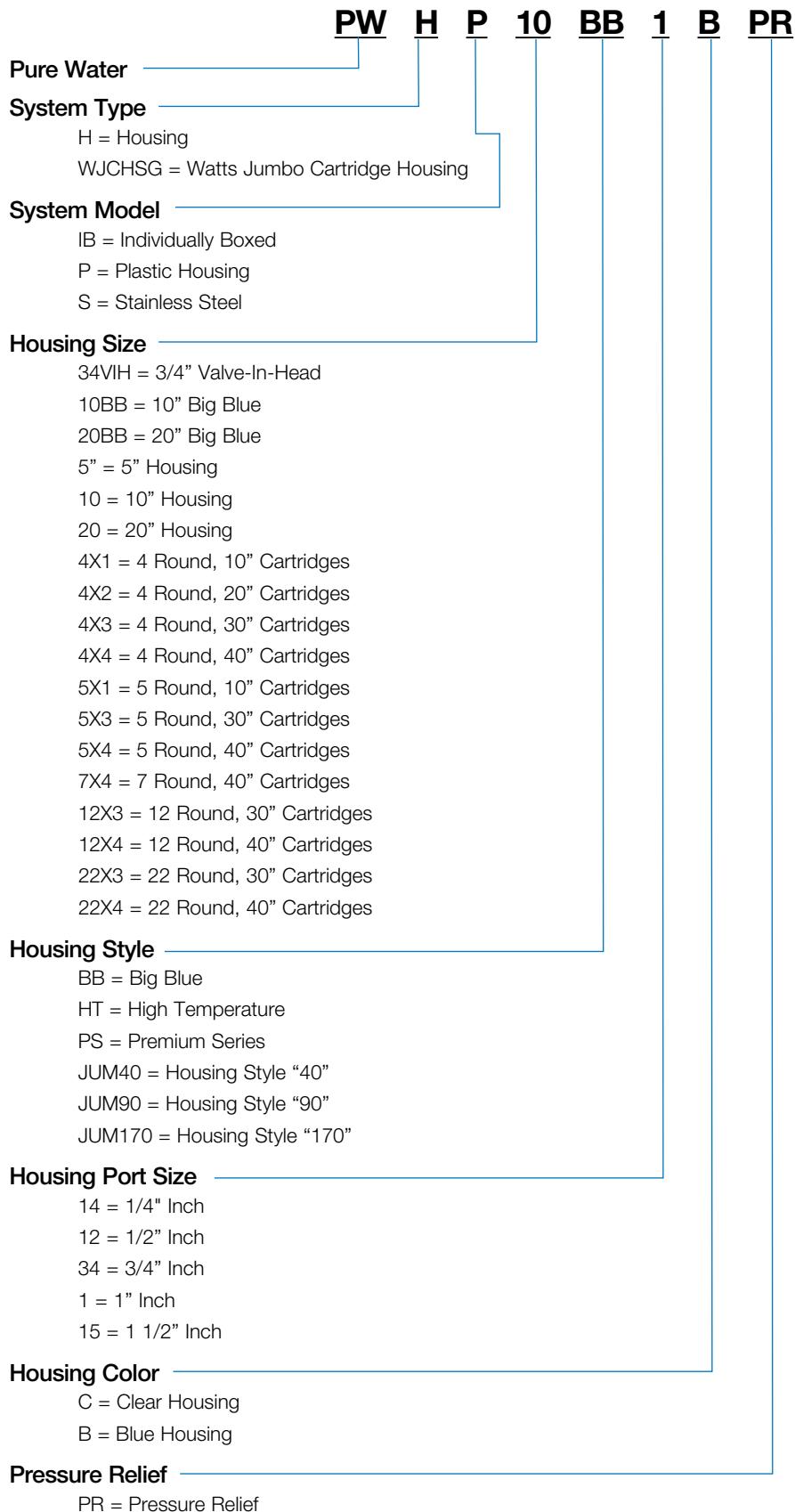
- Individual Boxed Plastic Housings
- Plastic Filter Housings
- Watts Jumbo Housing & Cartridges
- Stainless Steel Commercial/Industrial Filter Housings
- Jumbo SS Cartridge Housings

Filter Housings





Filter Housing Part Number Matrix



Plastic Filter Housings

Top Quality and Economical Plastic Filter Housings

Single Cartridge Filter Housings

Sizes: 1/4" – 1½" (6 – 40mm)

Our poly filter housings are manufactured from the highest quality, FDA grade, 100% polypropylene and acrylic styrene (for clear housings). Leak-proof sealing is accomplished by compression against a top seated EPDM O-ring located in the housing's sump. Thick wall and added ribs make the housings ideal for a wide range of applications. Polypropylene construction provides excellent chemical resistance with most acids, alcohol, ammonia, oils, plating solutions and many aggressive chemicals. Housings supplied with and without pressure relief valves.



PWHP Housings

Full product line

We offer a complete line of poly filter housings for virtually every application where single cartridge housings are typically used. Select from standard, heavy-duty, full-flow, high purity, high temp and valve-in-head models.

Features

- Full product line for more types, models, pipe fittings and options
- Heavy-duty construction, made using high-quality FDA grade polypropylene
- Superior chemical resistance from many aggressive chemicals
- Buttress thread design for superior security
- Thick side walls with heavy-duty ribs to provide greater strength
- Temperature rated to 125°F (52°C)
- Cap, sump and top-seated O-rings compress to provide leak proof sealing

Individually Boxed Plastic Housings in Master Cartons

MODEL NO.	HOUSING	TYPE	SUMP	CAP	WRENCH	BRACKET	CASE QTY.
PWHIB34VIH	PWWRSTDHSG	Valve-In-Head	Clear	White	PWWRSTDHSG	PWMBVIH	6
PWHIB10BB	PWWRBBHSG	Big Blue (BB)	Blue	Black	PWWRBBHSG	PWMBBB1	4
PWHIB20BB	PWWRBBHSG	Big Blue (BB)	Blue	Black	PWWRBBHSG	PWMBBB1	4

*Complete with housing, wrench, bracket and mounting screws



PWHIB10BB

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



Filter Housings

Plastic Filter Housings

MODEL NO.	SIZE	PIPE	SUMP	CAP	# CASE
Clear Housings					
PWHP1014C	10"	1/4"	Clear	White	12
PWHP1014CPR	10"	1/4"	Clear	White PR	12
PWHP1012C	10"	1/2"	Clear	White	12
PWHP1012CPR	10"	1/2"	Clear	White PR	12
PWHP1034C	10"	3/4"	Clear	White	12
PWHP1034CPR	10"	3/4"	Clear	White PR	12
PWHP10BB1CPR	10"	1"	Clear	Black PR	4
PWHP20BB1CPR	20"	1"	Clear	Black PR	6
10" Residential Housings					
PWHP1014B	10"	1/4"	Blue	Black	12
PWHP1014BPR	10"	1/4"	Blue	Black PR	12
PWHP1012B	10"	1/2"	Blue	Black	12
PWHP1012BPR	10"	1/2"	Blue	Black PR	12
PWHP1034B	10"	3/4"	Blue	Black	12
PWHP1034BPR	10"	3/4"	Blue	Black PR	12
20" Residential Housings					
PWHP2012B	20"	1/2"	Blue	Black	6
PWHP2012BPR	20"	1/2"	Blue	Black PR	6
10" Big Blue Housings					
PWHP10BB34BPR	10"	3/4"	Blue	Black PR	4
PWHP10BB1B	10"	1"	Blue	Black	4
PWHP10BB1BPR	10"	1"	Blue	Black PR	4
PWHP10BB15B	10"	1 1/2"	Blue	Black	4
PWHP10BB15BPR	10"	1 1/2"	Blue	Black PR	4
20" Big Blue Housings					
PWHP20BB34BPR	20"	3/4"	Blue	Black PR	4
PWHP20BB1B	20"	1"	Blue	Black	4
PWHP20BB1BPR	20"	1"	Blue	Black PR	4
PWHP20BB15CP	20"	1 1/2"	Blue	Black	4
PWHP20BB15CPR	20"	1 1/2"	Blue	Black PR	4
High Temp Housings (200°F / 93°C)					
PWHPHT1034	10"	3/4"	Red	Red	12
PWHPHT2034	20"	3/4"	Red	Red	12
Mounting Brackets - includes housing mounting screws					
PWMBVIH		Brkt, VIH Housing		1	
PWMBSTD1		Single, 10" & 20" Residential Housings		1	
PWMBSTD2		Double, 10" & 20" Residential Housings		1	
PWMBSTD3		Triple, 10" & 20" Residential Housings		1	
PWMBBB1		Single, 10" & 20" Big Blue Housing		1	
PWMBBB2		Double, 10" & 20" Big Blue Housing		1	
PWMBBB3		Triple, 10" & 20" Big Blue Housing		1	
Wrenches					
PWWRSTDHSG		Wrench for Residential Housings		1	
PWWRBBHSG		Wrench for Big Blue Housing		1	
PWWRDUAL		Dual Wrench for Membrane and Residential Filter Housings		1	
Mounting Screws					
PWMSSTDHSG		Mounting Screws for standard Housings		1	
PWMSFFHSG		Mounting Screws for Big Blue Housings		1	
O-Rings					
PWORSTDHSG		O-Ring for standard housings		1	
PWORBHSG		O-Ring for Big Blue housings		1	
PWORHTHSG		O-Ring for high temp housings		1	

For additional information, access online literature ES-WQ-PWHP

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



Big Blue Series
(10" and 20")



High Temp
(10" and 20")



Blue/Black



Clear

Watts® Jumbo Housing & Cartridges

Whole House Water Treatment and Commercial Filtration

Ideal for whole house water treatment and commercial filtration with optional activated carbon cartridge to remove chlorine bad tastes, foul odors and sediment.

Rugged Construction

Filter housings are made of rugged, glass-reinforced polypropylene with brass reinforced gauge port so they won't chip, rust or dent.

Low Cost

Watts Jumbo filters are an economical alternative to costly stainless steel filtration equipment.



PWWJCHSG



PWWJCP

Applications

Watts® Jumbo Cartridges are ideal for a wide range of applications, including:

- Whole house filtration
- Commercial filtration
- Industrial filtration
- Pre-filtration for reverse osmosis equipment
- Community water systems
- Sea water applications due to their non-corrosive construction
- Ideal replacement for bag filters
- A convenient alternative to multiple cartridge filters
- Water for livestock and poultry

Proprietary Cartridges

The replacement cartridge filter is totally proprietary, so you may enjoy the replacement cartridge business over the life of the equipment.

Conserves Water!

Watts Jumbo Cartridge Filter Systems are 100% efficient because no backwashing is required. Valuable water is conserved with no waste.

Watts Jumbo Filter Cartridge Housing

MODEL NO.	DESCRIPTION	HEIGHT (INCHES)	DIAMETER (INCHES)	PIPE FITTINGS (INCHES)
PWWJCHSG	Jumbo Cartridge Filter Housing	42.7"	15.4"	2" Slip PVC Female

Pleated Cartridges

Ideal for more critical applications, offering greater efficiency, more surface area for greater throughput and reduced cost.

MODEL NO.	MEDIA TYPE	MICRON RATING	PER CASE
PWWJCP1AB	PP	1 Absolute	1
PWWJCP1	PP	1	1
PWWJCP5	PP	5	1
PWWJCP20	PE	20	1
PWWJCP50	PE	50	1
PWWJCM150	Mesh	150	1

Note: 5, 20, 50 and 150-micron cartridges are cleanable and reusable to reduce costs.

Depth Cartridges

Melt blown polypropylene cartridges are recommended when depth filtration is necessary for the reduction of soft particulate.

MODEL NO.	MEDIA TYPE	MICRON RATING	PER CASE
PWWJCBM1	PP	1	1
PWWJCBM5	PP	5	1
PWWJCBM20	PP	20	1
PWWJCBM50	PP	50	1

Activated Carbon Cartridge

Ideal for whole house filtration to reduce chlorine, taste, odors and sediment.

MODEL NO.	MAX. FLOW	CAPACITY	CHLORINE REDUCTION
PWWJCAC5	15 GPM	140,000 Gals.	90%

Note: We build filtration systems, or they may be installed on site. For more information please inquire!

For additional information, access online literature ES-WQ-PWWJC.



Filter Housings

Stainless Steel Commercial/Industrial Filter Housings

Series PWHS

Commercial Quality Filter Housings

Connection Size: 1" NPT (25mm) – 4" Flange

Flow Rates: Up to 600 gpm (2271 lpm)

Top quality stainless steel filter housings with easy, safe and secure band-clamp lid closures. Watts Pure Water Series PWHS are compatible with a full range of double open end cartridges for liquid filtration applications.

Features

- 100% stainless steel for durability
- Constructed of 316 stainless steel
- Convenient band clamp lid closure is standard for easy cartridge replacement
- Pipe fittings are readily accessible for easy installation
- Adjustable top plate accepts variable length cartridges for more options
- Two drains provided for clean and dirty fluids
- Legs and mounting tabs are available
- Knife edge seals are provided at both ends of all DOE cartridges for superior performance
- Rated for temperatures to 212°F (100°C). (No plastic holding rods)
- Pressure rating to 150psi (10.3 bar)
- Protective polycoat over stainless steel standard finish



Premium Housings

Specifications

Material:	316 stainless steel
Pressure rating:	Housings are rated for pressures to 150psi (10.3 bar)
Temperature:	Housings are rated for temperatures to 212°F (100°C)
Gaskets & seals:	Buna-N is standard.
Finish:	Protective polycoat over stainless is standard finish
Cartridge types:	Housings are designed to accept DOE cartridges.

Commercial Quality Multi-Cartridge Stainless Steel Filter Housings (316SS)

MODEL NO.	ROUND	MAX. FLOW RATE		MAX. FLOW RATE		PIPE SIZE	DRAIN SIZE (NPT)	NO. OF STANDARD CARTRIDGES	CARTRIDGE OPTIONS (LENGTHS)	
		PLEATED	GPM	DEPTH	LPM				in.	mm
PWHS4X1	4	25	95	25	95	1" NPT	1/2"	4	9 1/4" - 10"	248 - 254
PWHS5X1	5	30	113	25	95	2" NPT	1/2"	5	9 1/4" - 10"	248 - 254
PWHS4X2	4	60	227	40	151	2" NPT	1/2"	4	20"	508
PWHS4X3	4	90	341	60	227	2" NPT	1/2"	4	29 1/4" or 30	743 or 761
PWHS4X4	4	120	454	80	363	2" NPT	1/2"	4	40"	1016
PWHS5X4	5	150	568	100	379	2" NPT	1/2"	5	40"	1016
PWHS12X3	12	250	946	180	681	3" flange	1/2"	12	29 1/4" or 30	743 or 761
PWHS12X4	12	300	1135	240	908	3" flange	1/2"	12	40"	1016
PWHS22X3	22	500	1893	330	1249	4" flange	1/2"	22	29 1/4" or 30	743 or 761
PWHS22X4	22	600	2271	440	1665	4" flange	1/2"	22	40"	1016

Premium Series Housings with Mounting Legs and Pressure Gauges (316SS)

MODEL NO.	ROUND	MAX. FLOW RATE		MAX. FLOW RATE		PIPE SIZE	DRAIN SIZE (NPT)	NO. OF STANDARD CARTRIDGES	CARTRIDGE OPTIONS (LENGTHS)	
		PLEATED	GPM	DEPTH	LPM				in.	mm
PWHSPS4X2	4	60	227	40	151	2" NPT	1/2"	4	20"	508
PWHSPS5X3	5	120	454	75	284	2" NPT	1/2"	5	29 1/4" or 30	743 or 761
PWHSPS5X4	5	150	568	100	388	2" NPT	1/2"	5	40"	1016
PWHSPS7X4	7	200	946	140	530	2" NPT	1/2"	7	40"	1016

Note: Flow rates shown above are for guidelines only. Actual flow rates are based on cartridge type, micron rating, solids content and a number of other factors.

For additional information, access online literature ES-WQ-PWHS

Series PWHSJUMBO

JUMBO-SS Cartridge Housings Stainless Steel Single Cartridge Models

Connection Size: 2" MNPT (50mm)

Flow Rates: Up to 150gpm (567 lpm)

The ideal filter housings for optimum convenience and savings.

Series PWHSJUMBO housing filters are designed to accept Series "JUMBO-SS" cartridges for easy installation and replacement. Filter housings are constructed using 316 stainless steel and are rated for pressures to 150psi. Pipe fittings on single cartridge models are 2" MNPT with pressure gauges installed on inlet and outlet fittings. Convenient, band clamp lid closures are easy to use, safe and secure. Protective poly coat over stainless steel is standard finish.



Model
PWHSJUM40



Model
PWHSJUM90



Model
PWHSJUM170

Commercial Quality Jumbo Cartridge Filter Housings in 316SS

MODEL NO.	MATERIAL	MAX FLOW (GPM)	CARTRIDGE STYLE	NUMBER OF CARTRIDGES	PIPE SIZE	LID CLOSURE
PWHSJUM40	316SS	50	"40"	1	2" NPT	V-Band
PWHSJUM90	316SS	100	"90"	1	2" NPT	V-Band
PWHSJUM170	316SS	150	"170"	1	2" NPT	V-Band

Note: Commercial quality jumbo cartridge housings are rated for pressures to 150psi (10 bar) and temperatures to 212°F (100°C). Pressure gauges included and installed on inlets and outlet.

For additional information, access online literature ES-WQ-PWHSJUMBO



Filter Housing Cartridges

Jumbo Filter Cartridges



PWJPL40

PWJPL40

FILTER HOUSING MODEL NO.	MICRON RATING	MODEL NO. WITH SYNTHETIC MEDIA	NUMBER PER CASE
40	1 Absolute	PWJPL40M1AB	1
	0.35	PWJPL40M.35	1
	1	PWJPL40M1	1
	5	PWJPL40M5	1
	20	PWJPL40M20	1
	50	PWJPL40M50	1
	100	PWJPL40M100	1



PWJPL90

PWJPL90

FILTER HOUSING MODEL NO.	MICRON RATING	MODEL NO. WITH SYNTHETIC MEDIA	NUMBER PER CASE
90	1 Absolute	PWJPL90M1AB	1
	0.35	PWJPL90M.35	1
	1	PWJPL90M1	1
	5	PWJPL90M5	1
	20	PWJPL90M20	1
	50	PWJPL90M50	1
	100	PWJPL90M100	1



PWJPL170

PWJPL170

FILTER HOUSING MODEL NO.	MICRON RATING	MODEL NO. WITH SYNTHETIC MEDIA	NUMBER PER CASE
170	1 Absolute	PWJPL170M1AB	1
	0.35	PWJPL170M.35	1
	1	PWJPL170M1	1
	5	PWJPL170M5	1
	20	PWJPL170M20	1
	50	PWJPL170M50	1
	100	PWJPL170M100	1

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

- Melt Blown Filter Cartridges
- Wound Cartridges
- Wound Cartridges with 304 SS Center Tubes for Temperatures to 200°F (93°C)
- Pleated Filter Cartridges
- Carbon Block Filter Cartridges
- Granular Coconut Carbon Cartridge (GAC)
- In-Line Filters



PWILGAC10



PWCB10LED



GAC Filters



Carbon Block Filter Cartridges



Pleated Filter Cartridges



Melt Blown Filter Cartridges



Filter Cartridges Part Number Matrix

PW MB 10BB M5

Pure Water

Cartridge Type

MB = Melt Blown Cartridge
SW = String Wound Cartridge
SWHT = String Wound High Temperature Cartridge
PL = Pleated Cartridge
CB = Carbon Block Cartridge
GAC = Granular Activated Carbon Cartridge
GACPH = Granular Activated Carbon & Phosphate
GACCL = Granular Activated Carbon & Calcite
GACKDF = Granular Activated Carbon & KDF
IL = In-Line Filter
PHOS = Polyphosphate Cartridge
KCSED = Kwik-Change Sediment
KCCB = Kwik-Change Carbon Block
KCGAC = Kwik-Change Granular Activated Carbon
KCUF = Kwik-Change Ultra Filtration Membrane
WJCP = Watts Jumbo Cartridge – Pleated
WJCMB = Watts Jumbo Cartridge – Melt Blown
WJCAC = Watts Jumbo Cartridge – Activated Carbon
JPL = Jumbo Pleated Cartridge

Cartridge Size

5" = 5" Cartridge
6" = 6" Inline
10 = 10" Cartridge or inline
13 = 13" Cartridge
20 = 20" Cartridge
195 = 19.5" Cartridge
30 = 30" Cartridge
40 = 40" Cartridge
BB = Big Blue Cartridge
On the "JPL" Jumbo Pleated Cartridges the filter size represents the "Cartridge Model"
40 = Model 40 Cartridge
90 = Model 90 Cartridge
170 = Model 170 Cartridge

Micron Rating

1AB = 1 Micron Absolute
0.35 = 0.35 Micron
1 = 1 Micron
5 = 5 Micron
10 = 10 Micron
20 = 20 micron
50 = 50 Micron
100 = 100 Micron
S = Standard Carbon Block – Not for Sale or Use in California
P = Premium Carbon Block
VOC = Volatile Organic Chemicals
LCV = Lead, Cyst, VOCs
LED = Lead
FTGS = Includes fittings
TUB = Includes fittings and tubing

Melt Blown Filter Cartridges

Flow Rates: Up to 20 gpm (75 lpm) on 4½" x 20" cartridges

Watts Pure Water series of Melt Blown Cartridges reduce sediment, dirt, rust and particles. Food grade for use with beverages, food, and potable water. A wide range of lengths and micron ratings are available.

Features

- Low cost
- Excellent chemical resistance
- Food grade for food and beverages
- No media migration
- High dirt holding capacity
- Wide range of lengths
- Five different micron ratings

- Beverages

- Pre-filtration for RO
- Fine chemicals
- Electronics
- Metal finishing
- Plating solutions



ANSI/NSF
STANDARD 42
COMPONENT
CERTIFIED



Melt Blown Filter Cartridges

Applications

- Potable water

Standard Diameter (2½")

MODEL NO.	LENGTH	OD	MICRON	NO. / CASE	WEIGHTS
9¾"					
PWMB10M1	9⅜"	2½"	1	48	14.4 6.5
PWMB10M5	9⅜"	2½"	5	48	14.4 6.5
PWMB10M10	9⅜"	2½"	10	48	14.4 6.5
PWMB10M20	9⅜"	2½"	20	48	14.4 6.5
PWMB10M50	9⅜"	2½"	50	48	14.4 6.5
20"					
PWMB20M1	20"	2½"	1	24	14.4 6.5
PWMB20M5	20"	2½"	5	24	14.4 6.5
PWMB20M20	20"	2½"	20	24	14.4 6.5
PWMB20M50	20"	2½"	50	24	14.4 6.5
30"					
PWMB30M1	30"	2½"	1	24	24 11.0
PWMB30M5	30"	2½"	5	24	24 11.0
PWMB30M20	30"	2½"	20	24	24 11.0
PWMB30M50	30"	2½"	50	24	24 11.0
40"					
PWMB40M1	40"	2½"	1	24	29 13.0
PWMB40M5	40"	2½"	5	24	29 13.0
PWMB40M20	40"	2½"	20	24	29 13.0
PWMB40M50	40"	2½"	50	24	29 13.0

Big Blue (BB) 4½" x 9¾"

MODEL NO.	LENGTH	OD	MICRON	NO. / CASE	WEIGHTS
9¾"					
PWMB10BBM1	9⅜"	4½"	1	24	26.4 12.0
PWMB10BBM5	9⅜"	4½"	5	24	26.4 12.0
PWMB10BBM20	9⅜"	4½"	20	24	26.4 12.0
PWMB10BBM50	9⅜"	4½"	50	24	26.4 12.0

Big Blue (BB) 4½" x 20"

MODEL NO.	LENGTH	OD	MICRON	NO. / CASE	WEIGHTS
20"					
PWMB20BBM1	20"	4½"	1	12	24 11.0
PWMB20BBM5	20"	4½"	5	12	24 11.0
PWMB20BBM20	20"	4½"	20	12	24 11.0
PWMB20BBM50	20"	4½"	50	12	24 11.0

For additional information, access online literature ES-WQ-PWMB

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWSW

Wound Polypropylene Filter Cartridges

Exceptional value when depth filtration is required.

Watts Pure Water series of String Wound Cartridges reduce sediment, dirt, rust and particles. Food grade for use with beverages, food, and potable water. A wide range of lengths and micron ratings are available.

Specifications

Material – Polypropylene

Maximum Operating Temperature (Plastic Core) – 140°F (60°C)

Maximum Operating Temperature (Metal Core) – 180°F (82°C)

Flow Rate (2.5" x 10" Cartridge)

1 micron - 3 gpm @ 4psi drop

5 micron - 6 gpm @ 3psi drop

20 micron - 9 gpm @ 2psi drop

50 micron - 9 gpm @ 1psi drop

Maximum Differential Pressure – 60 psid @ 73°F



PWSW10



PWSW10BB



PWSWHT10

String Wound Cartridges

MODEL NO.	LENGTH	OD	MICRON	NO. / CASE	WEIGHTS
					<i>lbs.</i> <i>kgs.</i>
PWSW10M1	9 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	1	30	12.0 5.4
PWSW10M5	9 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	5	30	12.0 5.4
PWSW10M20	9 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	20	30	12.0 5.4
PWSW10M50	9 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	50	30	12.0 5.4
PWSW20M1	20"	2 $\frac{1}{2}$ "	1	15	13.5 6.1
PWSW20M5	20"	2 $\frac{1}{2}$ "	5	15	13.5 6.1
PWSW20M20	20"	2 $\frac{1}{2}$ "	20	15	13.5 6.1
PWSW20M50	20"	2 $\frac{1}{2}$ "	50	15	13.5 6.1
PWSW30M1	30"	2 $\frac{1}{2}$ "	1	15	19.5 8.9
PWSW30M5	30"	2 $\frac{1}{2}$ "	5	15	19.5 8.9
PWSW30M20	30"	2 $\frac{1}{2}$ "	20	15	19.5 8.9
PWSW40M1	40"	2 $\frac{1}{2}$ "	1	10	13.0 5.9
PWSW40M5	40"	2 $\frac{1}{2}$ "	5	10	13.0 5.9
PWSW40M20	40"	2 $\frac{1}{2}$ "	20	10	13.0 5.9

Big Blue (BB) 4 $\frac{1}{2}$ " OD Cartridges

PWSW10BBM1	9 $\frac{1}{4}$ "	4 $\frac{1}{2}$ "	1	8	9.6	4.4
PWSW10BBM5	9 $\frac{1}{4}$ "	4 $\frac{1}{2}$ "	5	8	9.6	4.4
PWSW10BBM20	9 $\frac{1}{4}$ "	4 $\frac{1}{2}$ "	20	8	9.6	4.4
PWSW10BBM50	9 $\frac{1}{4}$ "	4 $\frac{1}{2}$ "	50	8	9.6	4.4
PWSW20BBM1	20"	4 $\frac{1}{2}$ "	1	4	9.6	4.4
PWSW20BBM5	20"	4 $\frac{1}{2}$ "	5	4	9.6	4.4
PWSW20BBM20	20"	4 $\frac{1}{2}$ "	20	4	9.6	4.4
PWSW20BBM50	20"	4 $\frac{1}{2}$ "	50	4	9.6	4.4

Cartridges with 304 Stainless Steel Center Tubes for Temperatures to 180°F (82°C)

PWSWHT10M5	9 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	5	30	12.0	5.5
PWSMHT10M20	9 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	20	30	12.0	5.5
PWSMHT10M50	9 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	50	30	12.0	5.5
PWSWHT20M5	20"	2 $\frac{1}{2}$ "	5	15	12.0	5.5
PWSWHT20M20	20"	2 $\frac{1}{2}$ "	20	15	12.0	5.5
PWSWHT30M5	30"	2 $\frac{1}{2}$ "	5	15	21.0	9.6
PWSWHT30M20	30"	2 $\frac{1}{2}$ "	20	15	21.0	9.6
PWSWHT40M5	40"	2 $\frac{1}{2}$ "	5	10	20.0	9.1
PWSWHT40M20	40"	2 $\frac{1}{2}$ "	20	10	20.0	9.1

Features

- Low cost
- Polypropylene media for chemical resistance
- Food grade ingredients for potable water
- No leachables to contaminate downstream
- Wide range of lengths and micron ratings
- Cartridges with stainless steel center tubes for higher temperature applications

For additional information,
access online literature
[ES-WQ-PWSW](#)

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Series PWPL

Pleated Filter Cartridges

Greater surface area for longer life and reduced filtration costs.

Watts Pure Water Pleated filter cartridges reduce sediment, dirt, rust, and particles. Outperform wound, spun, melt blown, resin bonded, and other "depth" type filter elements because of our high surface area.

Lower pressure drop is another significant advantage. Using pleated cartridges allows for increased flow rates and the use of smaller filter housings to reduce capital equipment costs.

Further savings are provided because our 100% synthetic filter media is cleanable, 5 micron and up, to lower cartridge replacement costs. Pleated filter cartridges outperform other pleated elements because our high-performance filter media is systematically produced using 100% synthetic fibers, with no binders or additives to leave a residue, foam or contaminate.

Our filter media is dramatically thicker than other products. For this reason, Pleated cartridges provide "depth" filtration for greater sediment removal, along with more surface area.

Features

- Filter media is pleated for greater surface area
- Synthetic filter media is cellulose-free
- "Thicker" filter media has a greater capacity to capture and retain particles, compared to thin, more rigid media types, which have less void space for particle retention
- One micron absolute and 0.35 media use a multi-ply laminate for superior performance
- Long lengths have netting to hold pleats in place
- All cartridge types and lengths are wrapped
- Full product line (Large selection of types, lengths & micron ratings)
- Low pressure drop, long life, and reduced filtration costs, compared to wound and spun cartridges
- No additives or binders, which may cause foaming.
- Increased dirt holding capacity, longer life, fewer cartridge replacements needed, and reduced filtration costs, compared to other pleated cartridge suppliers
- Increased particle removal efficiency
- Superior performance and appearance

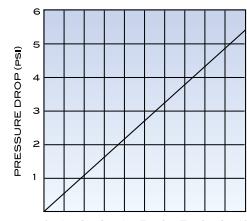


Pleated Filter Cartridges

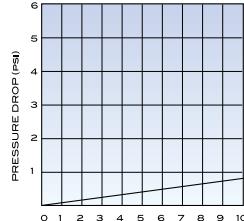
Pleated Filter Cartridges

Lower pressure drop for higher flow rates

These cartridges are pleated, so initial pressure drop is significantly less compared to depth cartridges, such as wound, spun, melt blown and resin bonded. As a result, higher flow rates are possible, reducing filter housing size requirements to lower capital equipment costs.

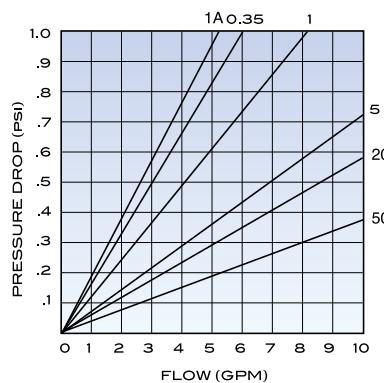


Depth Cartridge
(5 micron)

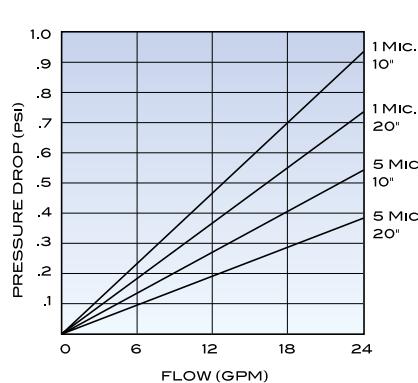


Pleated® Cartridge
(5 micron)

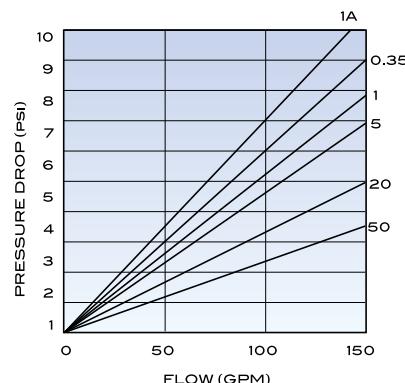
Use the pressure drop charts shown below to help determine the ideal flow rate for your particular application:



Standard Cartridges (9 3/4")



Big Blue (B-B) Cartridges



Jumbo Cartridges

Note: Pressure drop data shown above include filter housing and cartridge.

Flow rates

Maximum flow rate guidelines for our cartridges are shown below:

Micron Rating	MAXIMUM FLOW RATES PER CARTRIDGE (GPM)							
	9 3/4"	Standard Cartridge 20"	29 1/4"	10" Big Blue	20" Big Blue	40	Jumbo Cartridge 90	170
1 Absolute	3	6	9	8	12	20	40	80
0.35 micron	4	8	12	9	13	25	50	100
1 micron	4	8	12	10	15	30	60	120
5 micron	7	14	21	15	25	50	100	150
20 micron	8	16	24	15	25	50	100	150
50 micron	10	20	30	15	25	50	100	150

Note: Filter housing selection should also be considered when flow rate per cartridge is determined.



Filter Cartridges

Pleated Filter Cartridges

Standard 2³/₄" x 9³/₄" Length

MODEL NO.	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL10M1AB	Synthetic	1 Absolute	24
PWPL10M.35	Synthetic	0.35	24
PWPL10M1	Synthetic	1	24
PWPL10M5	Synthetic	5	24
PWPL10M20	Synthetic	20	24
PWPL10M50	Synthetic	50	24
PWPL10M100	Synthetic	100	24



PWPL19.5

Standard 2³/₄" x 19¹/₂" Length

MODEL NO.	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL195M1	Synthetic	1	24
PWPL195M5	Synthetic	5	24
PWPL1950M20	Synthetic	20	24

Standard 2³/₄" x 20" Length

MODEL NO.	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL20M1AB	Synthetic	1 Absolute	24
PWPL20M.35	Synthetic	0.35	24
PWPL20M1	Synthetic	1	24
PWPL20M5	Synthetic	5	24
PWPL20M20	Synthetic	20	24
PWPL20M50	Synthetic	50	24

Standard 2³/₄" x 40" Length

MODEL NO.	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL40M1	Synthetic	1	24
PWPL40M5	Synthetic	5	24
PWPL40M20	Synthetic	20	24
PWPL40M50	Synthetic	50	24



PWPL40

Big Blue (BB) 4¹/₂" x 10" Length

MODEL NO.	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL10BBM1AB	Synthetic	1 Absolute	8
PWPL10BBM.35	Synthetic	0.35	8
PWPL10BBM1	Synthetic	1	8
PWPL10BBM5	Synthetic	5	8
PWPL10BBM20	Synthetic	20	8
PWPL10BBM50	Synthetic	50	8

Note: Cartridges listed above fit in Full-Flow and Big-Blue® filter housings.



PWPL10BB

Big Blue (BB) 4¹/₂" x 20" Length

MODEL NO.	MEDIA TYPE	MICRON RATING	NUMBER PER CASE
PWPL20BBM1AB	Synthetic	1 Absolute	4
PWPL20BBM.35	Synthetic	0.35	4
PWPL20BBM1	Synthetic	1	4
PWPL20BBM5	Synthetic	5	4
PWPL20BBM20	Synthetic	20	4
PWPL20BBM50	Synthetic	50	4

Note: Cartridges listed above fit in Full-Flow and Big-Blue® filter housings.

For additional information, access online literature ES-WQ-PWPL.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



Filter Cartridges

Carbon Block Filter Cartridges

Standard Carbon Block

Filter Cartridges

Flow Rates: Up to 8 gpm (30 lpm)

Thick wall carbon construction for superior performance

Top-of-the-line coconut shell Carbon Block filter cartridge for chlorine taste, odor and sediment reduction.

Not for use or sale in California.

Features

- Superior chlorine reduction
- Low-pressure drop
- Will not channel
- Cost savings
- 100% coconut shell carbon
- Up to 90% chlorine reduction*
- FDA grade components and materials

Pressure — Temperature

Maximum operating pressure:
125 psig (8.5 bar)
Operating temperature: 50°F to
125°F (10°C to 52°C)
* Tested and verified by
independent laboratory testing.



PWCB



PWCBBB



PWCB20BBS have been tested and certified under NSF/ANSI standard 42 for materials only.

Dimensions

MODEL NO.	TYPE	OD <i>in.</i>	OD <i>mm</i>	LENGTH <i>in.</i>	LENGTH <i>mm</i>	MICRON RATING	CHLORINE REDUCTION*	NO. / CASE
PWCB10S	Thick Wall	2½"	64	9¾"	248	5 nominal	>4,000 Gal @ 1 gpm	20
PWCB20S	Thick Wall	2½"	64	20"	508	5 nominal	>8,000 Gal @ 2 gpm	12
PWCB10BBS	Thick Wall	4½"	114	9¾"	248	5 nominal	>10,000 Gal @ 2 gpm	12
PWCB20BBS	Thick Wall	4½"	114	20"	508	5 nominal	>20,000 Gal @ 4 gpm	6

*Estimated chlorine reduction capacity using 2ppm free chlorine.

For additional information, access online literature ES-WQ-PWCB.

Premium Carbon Block

Filter Cartridges

Flow Rates: Up to 4 gpm (15 lpm)

Thick wall carbon construction for superior performance

Top-of-the-line coconut shell Carbon Block filter cartridge for chlorine taste, odor and sediment reduction.

Features

- Superior chlorine reduction
- Low-pressure drop
- Will not channel
- Cost savings
- 100% coconut shell carbon
- FDA grade components and materials
- Solid Block Activated Carbon for long life

Temperature

Operating temperature: 40°F to 165°F (4.4°C to 73.8°C)

* Not performance tested or certified by NSF.



These carbon blocks are tested and certified under NSF International under NSF/ANSI Standard 42 for material requirements only.

Dimensions

MODEL NO.	TYPE	OD <i>in.</i>	OD <i>mm</i>	LENGTH <i>in.</i>	LENGTH <i>mm</i>	MICRON RATING	CHLORINE REDUCTION*	NO. / CASE
PWCB10P	Thick Wall	2⅜"	73	9¾"	248	5 nominal	>6,000 Gal @ 1 gpm	25
PWCB20P	Thick Wall	2⅜"	73	20"	508	5 nominal	>12,000 Gal @ 2 gpm	25
PWCB10BBP	Thick Wall	4⅝"	117	9¾"	248	5 nominal	>20,000 Gal @ 2 gpm	4
PWCB20BBP	Thick Wall	4⅝"	117	20"	508	5 nominal	>40,000 Gal @ 4 gpm	4

*Estimated capacity using 2ppm free chlorine with greater than 90% reduction.

For additional information, access online literature ES-WQ-PWCB.

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

VOC, LCV Carbon Block and Lead Out Filters

Volatile Organic Compounds (VOC)

This VOC filter is capable of reducing harmful VOCs such as MTBE's, lindane, atrazine, benzene, 2, 4-D, and others from your drinking water (See performance data sheet for a complete list of VOCs).

It is estimated that VOC's are present in one-fifth of the nation's water supplies. These water contaminants can enter ground water from a variety of sources including localized use of herbicides and pesticides, gasoline or oil spills, leaking underground fuel tanks, septic system cleaners, and chemicals used in the dry-cleaning industry.

LCV (Lead, Cysts, VOCs)

This specially formulated carbon block is NSF certified for the reduction of lead, cryptosporidium, giardia, and entamoeba, as well as harmful volatile organic chemicals

Lead Out

Independently Tested and verified for the reduction of lead, reduces chloramines, chlorine taste and odor, reduces sand, silt, sediment and rust. Filter uses unique Lead Out Filtration Media. Filters down to 1 micron. Perfect application for campers and RV units, also can be easily installed in your standard 10 inch filter bowl.

2½" X 10" Carbon Block Cartridges - VOCs, LCV & Lead Out

MODEL NO.	DESCRIPTION	QUANTITY PER CARTON
PWCB10VOC	10 inch 1-Micron Carbon Block VOC (Volatile Organic Chemicals) Filter	20
PWCB10LCV	10 inch 1-Micron Carbon Block LCV (Lead, Cysts, VOCs) Filter	20
PWCB10LED	10 inch 1-Micron Carbon Block Lead (Lead Out) Filter	20



PWCB10VOC



PWCB10LCV



PWCB10LED



Filter Cartridges

Granular Coconut Carbon Cartridge (GAC)

GAC Filter Replacement Cartridges

Granular Activated Carbon (GAC) Cartridges

Sizes: 2 $\frac{3}{4}$ " x 10", 2 $\frac{3}{4}$ " x 20", 4 $\frac{1}{2}$ " x 10", and 4 $\frac{1}{2}$ " x 20"

GAC filters are an effective way of removing volatile compounds from drinking water for better tasting water. They are used to remove chlorine, odor and taste from water. Polishing RO water with a Watts GAC cartridge improves its taste.

Specifications

Media	Water washed coconut shell activated carbon
Minimum / Maximum Working Pressure	20psi / 125psi
Minimum / Maximum Temperature	40°F / 100°F (4°C / 38°C)
Maximum Flow Rate	1 GPM (9 $\frac{3}{4}$ "), 3 GPM (4.5" x 9 $\frac{3}{4}$ "), 5 GPM (4.5" x 20")



GAC Filters

Water Washed Coconut Shell Granular Activated Carbon Cartridges (GAC)

MODEL NO.	TYPE	O.D.	LENGTH	CAPACITY (GALS.)	NO. / CASE
PWGAC10	GAC	2 $\frac{3}{4}$ "	9 $\frac{3}{4}$ "	2,500	24
PWGAC20	GAC	2 $\frac{3}{4}$ "	20"	5,000	12
PWGAC10BB	GAC	4 $\frac{1}{2}$ "	9 $\frac{3}{4}$ "	7,500	8
PWGAC20BB	GAC	4 $\frac{1}{2}$ "	20"	15,000	4

For additional information, access online literature ES-WQ-PWGAC.

Series PWIL

In-Line Filters

Connection Size: 1/4" FNPT

Perfect for residential ice makers as well as refrigerators, drinking fountains, coffee and tea brewers, motor homes, and campers.



PWILGAC10

Features

- Final polishing filter
- Reduces bad taste and odor
- GAC model with phosphate to help reduce scale
- GAC models with calcite to balance pH
- GAC models with KDF for inhibiting bacterial growth
- Coconut shell activated carbon. Rated for flow rates to 0.75. GPM and 1,500 gallons capacity

In-Line Filters RO Filters

Coconut Shell GAC – Ideal for RO Post Filter

MODEL NO.	O.D.	LENGTH	MEDIA	TYPE	FITTING SIZE	FITTING TYPE	NO./CASE
PWILGAC10	2"	10"	GAC	Coconut shell	1/4"	FNPT	25
PWILGAC6	2"	6"	GAC	Acid wash coconut shell	1/4"	FNPT	25

GAC with phosphate for scale reduction

PWILGACPH10	2"	10"	GAC	Phosphate	1/4"	FNPT	25
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In-line Filters with GAC and Calcite to balance pH

PWILGACCL10	2"	10"	GAC	With Calcite	1/4"	FNPT	12
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In-line Filters with GAC and KDF* for inhibiting bacterial growth – Ideal for residential icemaker/refrigerator

PWGACKDFFTGS	2"	10"	GAC	KDF	1/4"	FNPT	5
PWGACKDFTUB	2"	10"	GAC	KDF	1/4"	FNPT	6

These filters reduce scale build-up in appliances* and inhibit bacterial growth. Lasts up to 5 years or up to 20,000 Gallons.

*KDF Fluid Treatments Inc.

For additional information, access online literature ES-WQ-PWIL

For Technical Assistance Call Your Authorized Watts Pure Water Representative.

			Telephone	E-mail	
		HEADQUARTERS: Watts Regulator Company 815 Chestnut St., North Andover, MA 01845-6098 U.S.A.	978 688-1811	watts@wattswater.com	
North East		Edwards, Platt & Deely, Inc. 368 Wyandanch Ave., North Babylon, NY 11703 Vernon Bitzer Associates, Inc. W. P. Haney Company, Inc.	277 Royal Ave., Hawthorne, NJ 07506 980 Thomas Drive, Warminster, PA 18974 51 Norfolk Ave., South Easton, MA 02375	973 427-2898 631 253-0600 215 443-7500 508 238-2030	p044@watts.com p073@watts.com P009@watts.com p088@watts.com
Mid Atlantic		Disney McLane & Associates J. B. O'Connor Company, Inc. RMI The Joyce Agency, Inc. WMS Sales, Inc. Main office	428 McGregor Ave., Cincinnati, OH 45206 P.O. Box 12927, Pittsburgh, PA 15241 2533 Mechanicsville Tpk., Richmond, VA 23223 8442 Alban Rd., Springfield, VA 22150 9580 County Rd., Clarence Center, NY 14032	800 542-1682 724 745-5300 804 643-7355 703 866-3111 716 741-9575	p017@watts.com p047@watts.com rmi@ricmrk.com p069@watts.com p091@watts.com
South East		Billingsley & Associates, Inc. Billingsley & Associates, Inc. Francisco J. Ortiz & Co., Inc. Mid-America Marketing, Inc. Mid-America Marketing, Inc. Mid-America Marketing, Inc. Smith & Stevenson Co., Inc. Harry Warren, Inc. Harry Warren, Inc.	2728 Crestview Ave., Kenner, LA 70062-4829 478 Cheyenne Lane, Madison, MS 39110 Charlyn Industrial Pk., Road 190 KM1.9 - Lot #8, Carolina, Puerto Rico 00983 203 Industrial Drive, Birmingham, AL 35211 2611 Grandview Avenue, Nashville, TN 37211 5466 Old Hwy. 78, Memphis, TN 38118 4935 Chastain Ave., Charlotte, NC 28217 1400 North Orange Blossom Trail, Orlando, FL 32804 2861-B Bankers Industrial Drive, Atlanta, GA 30360	504 602-8100 601 856-7565 787 769-0085 205 879-3469 615 259-9944 901 795-0045 704 525-3388 407 841-9237 770 209-3310	p013@watts.com ckenny@billingsley.com p029@watts.com p032@watts.com john@midamericamktg.com sales@midamericamktg.com p003@watts.com p071@watts.com p071@watts.com
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South Central		Hugh M. Cunningham, Inc. Sandia Group, Inc. Mack McClain & Associates, Inc. Mack McClain & Associates, Inc. Mack McClain & Associates, Inc. OK! Sales, Inc.	13755 Benchmark, Dallas, TX 75234 3167 San Mateo #308, Albuquerque, NM 87110 4407 Meramec Bottom, Suite G, St. Louis, MO 63129 1045 76th St., Suite 1000, West Des Moines, IA 50266 15090 West 116th St., Olathe, KS 66062 214 NE 12th. St., Ste A, Moore, OK 73160	972 888-3808 800 339-0191 314 894-8188 515 288-0184 913 339-6677 405 794-5200	p031@watts.com p031@watts.com p045@watts.com p049@watts.com p083@watts.com oksales@coxinet.net
Western		Delco Sales, Inc. Delco Sales, Inc. Fanning & Associates, Inc. Hollabaugh Brothers & Associates Hollabaugh Brothers & Associates P I R Sales, Inc. REPCOR R. E. Fitzpatrick Sales, Inc.	1930 Raymer Ave., Fullerton, CA 92833 111 Sand Island Access Rd., Unit I-4, Honolulu, HI 96819 6765 Franklin St., Denver, CO 80229-7111 6915 South 194th St., Kent, WA 98032 3028 S.E. 17th Ave., Portland, OR 97202 3050 North San Marcos Place, Chandler, AZ 85225 2455 Mercantile Drive, Ste.100, Rancho Cordova, CA 95742 4109 West Nike Dr., West Jordan, UT 84088	714 888-2444 808 842-7900 303 289-4191 253 867-5040 503 238-0313 480 892-6000 916 386-2233 801 282-0700	sales@delcosales.com p021@watts.com sales@fanningandassociates.com p001@watts.com p006@watts.com sales@pirsales.com sales@repcor1.com p007@watts.com
Canada		Watts Water Technologies (Canada) Inc. J.D.S. Sales Ltd. Hydro-Mechanical Sales Ltd. Hydro-Mechanical Sales Ltd. Les Ent. Roland Lajoie Inc. Les Ent. Roland Lajoie Inc. Walmar Mechanical Sales GTA Sales Team Palser Enterprises Ltd. Mech-Tech Sales Mar-Win Agencies Ltd. RAM Mechanical Marketing Inc. RAM Mechanical Marketing Inc. Allan Forrest Sales Ltd. Allan Forrest Sales Ltd. Hy-Line Sales Limited	5435 North Service Road, Burlington, Ontario L7L 5H7 4 Lancaster Street, St. John's, NF A1A 5P7 3700 Joseph Howe Drive, Suite 1, Halifax, NS B3L 4H7 297 Collishaw Street, Suite 13, Moncton, NB E1C 9R2 6221 Marivaux, St-Leonard, QC H1P 3H6 23 Buisson, Pont Rouge, QC G3H 1X9 24 Gurdwara Road, Nepean, ON K2E 8B5 Watts Water Technologies (Canada) Inc. 1885 Blue Heron Drive #10 (shipping), London, ON N6H 5L9 P.O. Box 28136 (mail only), London, ON N6H 5L9 1069 Gordon Avenue, Sudbury, ON P3A 2V5 1333 Clifton Street, Winnipeg, MB R3E 2V1 1450 Cornwall Street, Regina, SK S4R 2H8 510 Avenue M South, Saskatoon, SK S7M 2K9 10-4980 12A Street SE, Calgary, AB T2G 5K9 18039 107th Avenue, Edmonton, AB T5S 1K3 Unit 2A-27355 Gloucester Way, Langley, BC V4W 3Z8	905 332-4090 709 579-5771 866 493-7667 866 493-7667 514 328-6645 418 873-2500 613 225-9774 888 208-8927 519 471-9382 705 525-2543 204 775-8194 306 525-1986 306 244-6622 403 243-7001 780 452-8551 800 266-3114	info@wattscanada.ca jds@nf.sympatico.ca jim@hydromechanical.ca mark@hydromechanical.ca info@lajoie.com info@lajoie.com infomech@walmar.net gtasales@wattscanada.ca sales@palserent.com bertlemay@sympatico.ca marwin@mts.net info@rammarketing.ca info@rammarketing.ca info@allanforrest.com info@allanforrest.com customer-service@hylinesales.com
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A Watts Water Technologies Company